United States Department of Agriculture

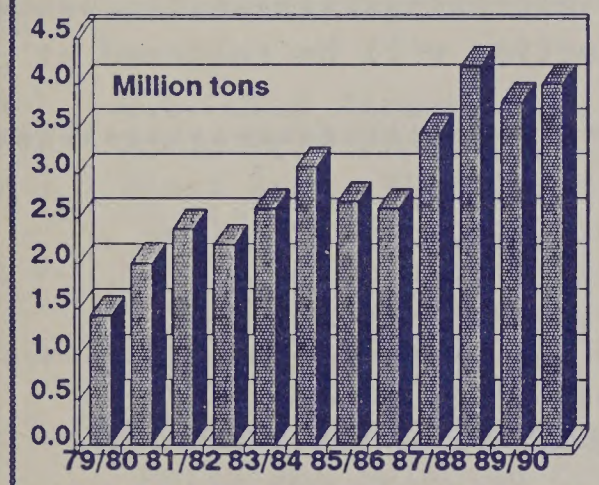
Foreign Agricultural Service

Circular Series
WAP 12-90
December 1990

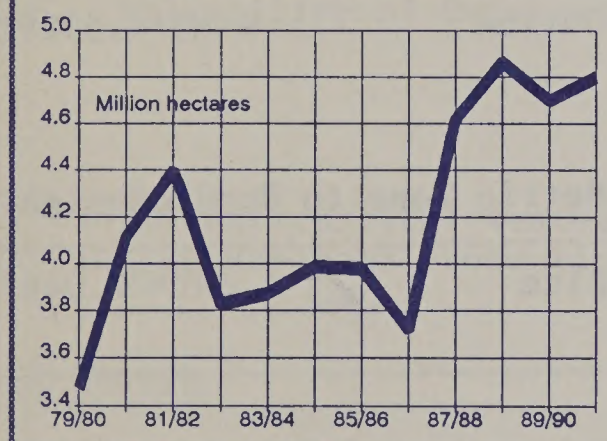
World Agricultural Production

Indian Rapeseed

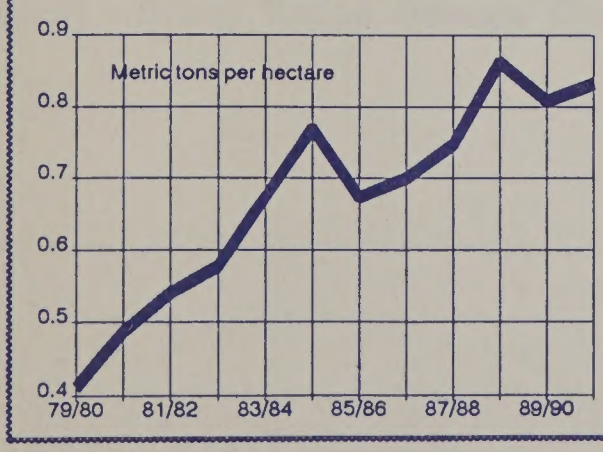
Production



Harvested Area



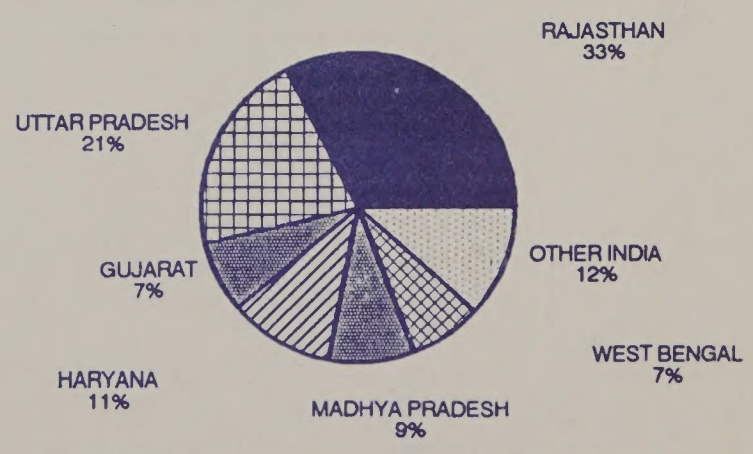
Yield



Production Articles This Month...

Indian Rapeseed Production

1988/89 Percentages



Approved by the World Agricultural Outlook Board - USDA

This report draws on information from USDA's global network of agricultural attaches and counselors, official statistics of foreign governments, other foreign source materials, and results of office analysis. Estimates of U.S. acreage, yield, and production are from USDA's Agricultural Statistics Board, except where noted. All numbers in this report are based on unrounded data and detail may not add to totals because of rounding. This report reflects official USDA estimates released in World Agricultural Supply and Demand Estimates (WASDE-249), December 11, 1990.

This report was prepared by the Production Estimates and Crop Assessment Division (PECAD), FAS/USDA, Washington, D.C. 20250. Further information may be obtained by writing to the division or by calling (202) 382-8888 or by FAX (202) 447-7729.

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* The next issue of World Agricultural Production will be released at 3 p.m. *
* eastern time on January 14, 1991. *
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CONVERSION TABLE

Metric Tons to Bushels		Metric Tons to 480-lb. Bales	
Wheat & Soybeans	= MT*36.7437	Cotton	= MT*4.592917
Corn, Sorghum, Rye	= MT*39.36825		
Barley	= MT*45.929625		
Oats	= MT*68.894438	Metric Tons to Hundredweight	
1 hectare	= 2.471044 acres	Rice	=MT*22.04622
1 kilogram	= 2.204622 pounds		

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PRODUCTION HIGHLIGHTS FOR 1990/91

December 1990

WHEAT: World production for 1990/91 is estimated at a record 594.3 million metric tons, up 1.1 million or less than 1 percent from last month and up 11 percent from last year's harvest. Country highlights are as follows:

- **Canada** — Production is estimated at a record 31.8 million tons, up 0.8 million or 3 percent from last month and up 29 percent from last year. The crop, which is a record, is based on the final estimate by Statistics Canada.

- **China** — Production is estimated at a record 96.5 million tons, up 0.5 million or 1 percent from last month and up 6 percent from last year. Record winter and spring wheat crops were reported across the country due to higher sown area and excellent weather during the growing season.

- **Mexico** — Production is estimated at 3.9 million tons, up 0.4 million or 11 percent from last month, but down 3 percent from last year. The estimated yield was increased due to beneficial summer rains for the spring planted crop.

- **EC-12** — Production is estimated at 80.8 million tons, down 0.3 million or less than 1 percent from last month, but up 3 percent from last year. Lower official harvest reports from Denmark and the United Kingdom were only partially offset by an increase in Greece.

- **Brazil** — Production is estimated at 3.5 million tons, down 0.3 million or 8 percent from last month and down 37 percent from last year. Mid-season frosts in Parana, Mato Grosso, and Sao Paulo devastated yields. Harvest results from Rio Grande do Sul indicate additional yield losses occurred as a result of excessively wet conditions late in the season.

- **South Africa** — Production is estimated at 1.8 million tons, down 0.1 million or 5 percent from last month and down 10 percent from last year. The reduction in estimated yield is attributed to the continuing drought, particularly in the Orange Free State.

COARSE GRAINS: World production for 1990/91 is estimated at 820.7 million tons, up 0.7 million or less than 1 percent from last month and up 3 percent from last year. Country highlights are as follows:

- **South Africa** — Production is estimated at 7.8 million tons, down 1.5 million or 16 percent from last month and down 22 percent from a year earlier. Hot, dry weather during planting, particularly in the western Transvaal and the Orange Free State, has reduced estimated area and yield.

- **EC-12** — Production is estimated at 77.4 million tons, up 1.1 million or 1 percent from last month, but down 6 percent from last year. The higher estimate reflects larger-than-expected barley production in the United Kingdom, Denmark, and Greece.

- **Canada** — Production is estimated at 26.0 million tons, up 0.4 million or 2 percent from last month and up 11 percent from last year. The revision is based on the final estimates of Statistics Canada; corn output (7.0 million tons) is an estimated record harvest.

- **Turkey** — Production is estimated at 8.9 million tons, up 0.4 million or 5 percent from last month and up 19 percent from last year. Increases in estimated yield and area boosted corn production.

RICE (MILLED-BASIS): World production for 1990/91 is estimated at a record 348.0 million tons, up 2.7 million or 1 percent from last month and up 2 percent from the 1989/90 crop. Foreign production in 1990/91 is projected at a record 343.1 million tons. U.S. output is projected at 4.9 million tons, down 4 percent from last season. Country highlights are as follows:

- **China** — Production is estimated at a record 129.5 million tons, up 2.1 million or 2 percent from last month and up 3 percent from last year. The government of China is estimating a record late rice crop to follow its record early rice and single rice harvests. An increase in the area planted to hybrid rice and favorable weather contributed to the estimated record yields this year.

- **Vietnam** — Production is estimated at 11.7 million tons, up 0.3 million or 3 percent from last month, but down 2 percent from last year. The increase is due to higher estimated yield.

- o **Japan** — Production is estimated at 9.6 million tons, up 0.2 million or 2 percent from last month and up 2 percent from last year. Although rice area fell slightly and two typhoons in September caused some losses, production was higher than expected due to favorable weather early in the growing season and good harvests in eastern Japan and Hokkaido.

- o **South Korea** — Production is estimated at 5.6 million tons, up 0.1 million or 2 percent from last month, but down 5 percent from last year. The increase reflects higher estimated harvested area.

- o **Philippines** — Production is estimated at 6.1 million tons, down 0.1 million or 2 percent from last month, but up 6 percent from last year. The decrease is due to typhoon damage, causing a reduction in estimated harvested area.

OILSEEDS: Total world oilseeds production during 1990/91 is forecast at a record 216.4 million tons, down 1.2 million or 1 percent from last month, but up 4.8 million or 2 percent above the 1989/90 crop. Foreign production during 1990/91 is projected to be a record 156.5 million tons, down 1.3 million from last month, but up 4.2 million or 3 percent from last year. U.S. total oilseed production is estimated at 59.9 million tons, up 0.2 million from last month and up 0.6 million or 1 percent from last year.

* **Soybeans:** World production for 1990/91 is forecast at 105.1 million tons, down 0.7 million from last month and down 0.9 million or 1 percent from last year. Total foreign soybean output is forecast down 0.7 million tons or 1 percent from last month to 53.3 million and down 0.3 million from 1989/90. Country highlights are as follows:

- o **United States** — Production is estimated at 51.8 million tons, down 0.5 million or 1 percent from last year. There was no change in this month's estimate.

- o **Brazil** — Production is forecast at 18.0 million tons, down 0.5 million or 3 percent from last month and down 1.3 million or 7 percent from last year. The late release and high cost of inadequate levels of production credit have led to decreased planted area. Area may decline between 25 and 50 percent in the center-west and by as much as 5 percent in the south. Planting has been hampered by hot, dry conditions in the northern soybean areas, while heavy rains in the south reduced seeding progress.

- o **Thailand** — Production is estimated at 0.5 million tons, down 0.1 million or 23 percent from last month and down 29 percent from last year. Inadequate moisture during the planting season, along with an estimated decrease in area, contributed to the reduction.

* **Cottonseed:** World production for 1990/91 is forecast at 33.5 million tons, down slightly from last month, but up 2.8 million or 9 percent from last year. Total foreign production is estimated at 28.1 million tons, down 0.2 million or less than 1 percent from last month, but up 1.6 million or 6 percent from last year. Country highlights are as follows:

- o **United States** — This month the National Agricultural Statistics Service increased production to 5.4 million tons, up 0.2 million or 3 percent from last month and up 1.2 million or 28 percent from last year. The new production level reflects higher estimated yield.

- o **South Africa** — Production is estimated at 0.1 million tons, down 0.1 million or 63 percent from last month and down 32 percent from last year. Estimated area was severely reduced due to hot, dry weather.

* **Peanuts:** World production for 1990/91 is forecast at 21.3 million tons, down 0.2 million or 1 percent from last month and down 0.2 million or 1 percent from 1989/90. Total foreign production is estimated at 19.7 million tons, down 0.2 million or 1 percent from last month, but up 0.1 million or less than 1 percent from 1989/90. Country highlights are as follows:

- o **United States** — Production is estimated at 1.6 million tons, down 0.2 million or 13 percent from last year. There was no change in estimated production this month.

- o **South Africa** — Production is estimated at 0.1 million tons, down 0.1 million or 58 percent from last month and down 16 percent from last year. Hot, dry weather during planting severely reduced estimated sown area.

* **Sunflowerseed:** World production for 1990/91 is forecast at 22.0 million tons, down 0.4 million or 2 percent from last month, but up 0.1 million from last year. Total foreign production was reduced by 0.4 million tons or 2 percent, to 21.0 million this month. This season's foreign production is now expected to be only slightly above last year's level. Country highlights are as follows:

- o **United States** — Production is estimated at 1.0 million tons, up 0.2 million or 20 percent from last year. There was no change in estimated production this month.

- o **Argentina** — Production is estimated at 3.4 million tons, down 0.4 million or 11 percent from last month and down 0.4 million or 11 percent from last year. Area is expected to decrease 0.4 million hectares or 14 percent due to shrinking profit margins and more attractive alternatives such as livestock and cotton.

* **Rapeseed:** World production for 1990/91 is forecast at a record 23.8 million tons, down marginally from last month, but up 2.2 million or 10 percent from last year. There were no significant country changes this month.

* **Flaxseed:** World production for 1990/91 is forecast at 2.3 million tons, down marginally from last month, but up 0.4 million or 21 percent from last year. While production by the United States is small, this year's output is expected to increase by 147 percent over last year, to 84,000 tons. Total foreign production is pegged at 2.2 million tons, up nearly 0.4 million or 19 percent from last year. There were no significant country changes this month.

* **Copra:** World production for 1990/91 is forecast at 4.9 million tons, up marginally from last month and up 0.2 million or 4 percent over last year. Copra production reached a record 5.3 million in 1985/86. There were no significant country changes this month.

* **Palm Kernels:** World production for 1990/91 is forecast at a record 3.4 million tons, up 30,000 tons or 1 percent from last month and up nearly 2 percent from last year. There were no significant country changes this month.

* **Palm Oil:** World production for 1990/91 is forecast at a record 11.2 million tons, up 0.3 million or 2 percent from last year. The upward trend continues as new trees come into production. There were no changes this month.

COTTON: World cotton production in 1990/91 is estimated at 87.2 million bales, up 0.4 million or less than 1 percent from last month and up 7.3 million or 9 percent from last year. Foreign production is estimated at 71.8 million bales, down 0.1 million from last month, but 4.1 million or 6 percent above the 1989/90 estimate. Country highlights are as follows:

- **United States** — Production is estimated at 15.4 million bales, up 0.5 million or 3 percent from last month and up 26 percent from last year. The output increase is due to excellent fall weather, which aided boll maturity and harvest operations.

- **Turkey** — Production is estimated at a record 3.0 million bales, up 0.1 million or 5 percent from last month and up 5 percent from the previous year. The increase is due to favorable weather during fruiting and maturing which boosted yields above average and to the increased use of improved varieties.

- **South Africa** — Production is estimated at 0.2 million bales, down 0.1 million or 39 percent from last month and down 32 percent from last year. Hot, dry conditions during planting reduced the area sown.

TABLE 1

U.S. Crop Acreage, Yield, and Production 1/

COMMODITY	PLANTED AREA			HARVESTED AREA			YIELD				PRODUCTION			
		Prel.	Proj.		Prel.	Proj.		Prel.	1990/91 Proj.			Prel.	1990/91 Proj.	
	1988/89	1989/90	1990/91	1988/89	1989/90	1990/91	1988/89	1989/90	Nov.	Dec.	1988/89	1989/90	Nov.	Dec.
	--Million Acres--			--Million Acres--			--Bushels per Acre--				--Million Bushels--			
All Wheat	65.5	76.6	77.3	53.2	62.2	69.4	34.1	32.7	39.6	39.6	1,812	2,037	2,744	2,744
Winter	48.8	55.1	57.0	39.8	41.5	50.0	39.2	35.0	40.7	40.7	1,562	1,455	2,036	2,036
Other	16.7	21.5	20.3	13.4	20.7	19.4	18.7	28.1	36.5	36.5	250	582	708	708
Rye	2.4	2.0	1.6	0.6	0.5	0.4	24.7	28.2	27.1	27.1	15	14	10	10
Soybeans	58.8	60.8	57.7	57.4	59.5	56.5	27.0	32.3	33.7	33.7	1,549	1,924	1,904	1,904
Corn	67.7	72.3	74.5	58.3	64.8	66.7	84.6	116.2	119.0	119.0	4,929	7,527	7,935	7,935
Sorghum	10.3	12.6	10.7	9.0	11.2	9.3	63.8	55.4	60.5	60.5	577	618	560	560
Barley	9.8	9.1	8.2	7.6	8.3	7.6	38.0	48.6	55.2	55.2	290	404	419	419
Oats	13.9	12.1	10.4	5.5	6.9	6.0	39.3	54.3	60.2	60.2	218	374	358	358
							--Pounds per Acre--				---Million CWT.---			
Rice	2.9	2.7	2.9	2.9	2.7	2.8	5,514	5,749	5,499	5,499	159.9	154.5	154.4	154.4
											---Million 480-Pound---			
All Cotton	12.5	10.6	12.3	12.0	9.5	11.5	619	614	622	641	15.4	12.2	14.9	15.4

1/ Source: All estimates are provided by the National Agricultural Statistics Service (NASS) of the United States Department of Agriculture, and are published in the Crop Production circular available from NASS.

TABLE 2

World Crop Production Summary

Commodity	World	Total Foreign	North America			Europe			USSR	Asia					South America		Selected Other			All Other Countries
			United States	Canada	Mexico	EC-12	Oth. W. Europe	Eastern Europe		China	India	Indo-nesia	Paki-stan	Thai-land	Argen-tina	Brazil	Aus-tralia	South Africa	Turkey	
	——Million Metric Tons——																			
Wheat																				
1988/89	500.3	451.0	49.3	16.0	3.2	74.7	3.8	44.8	84.4	85.4	46.2	0.0	12.7	0.0	8.4	5.8	14.1	3.5	15.0	16.9
1989/90 prel.	536.5	481.1	55.4	24.6	4.0	78.3	4.4	44.2	92.3	90.8	54.0	0.0	14.4	0.0	10.2	5.6	14.1	2.0	11.5	15.5
1990/91 proj.																				
November	593.2	518.5	74.7	31.0	3.5	81.0	5.0	44.4	108.0	96.0	54.0	0.0	14.3	0.0	12.0	3.8	15.5	1.9	14.0	17.4
December	594.3	519.7	74.7	31.8	3.9	80.8	5.0	44.4	108.0	96.5	54.0	0.0	14.3	0.0	12.0	3.5	15.5	1.8	14.0	17.5
Coarse Grains																				
1988/89	731.4	581.7	149.7	19.7	13.8	88.1	11.4	61.3	97.5	94.2	31.7	5.2	2.4	4.4	7.3	26.7	6.7	13.0	10.0	88.4
1989/90 prel.	800.6	579.1	221.5	23.5	14.1	82.0	12.4	68.0	104.8	94.6	31.2	4.8	2.8	4.2	8.3	23.1	6.9	10.0	7.5	80.8
1990/91 proj.																				
November	820.0	589.6	230.4	25.6	15.0	76.3	13.2	60.9	114.0	102.7	32.3	5.0	2.9	3.9	9.5	25.4	6.8	9.3	8.5	78.4
December	820.7	590.3	230.4	26.0	15.0	77.4	13.3	60.9	114.0	102.7	32.3	5.0	2.9	4.0	9.5	25.4	6.9	7.8	8.9	78.3
Rice (Milled)																				
1988/89	331.0	325.8	5.2	0.0	0.3	1.3	0.0	0.2	1.9	118.4	70.7	27.5	3.2	14.0	0.3	7.5	0.6	0.0	0.2	23.7
1989/90 prel.	340.8	335.7	5.1	0.0	0.4	1.4	0.0	0.2	1.7	126.1	70.0	29.1	3.2	13.7	0.2	5.4	0.6	0.0	0.2	23.2
1990/91 proj.																				
November	345.2	340.3	4.9	0.0	0.3	1.5	0.0	0.2	1.7	127.4	73.0	28.8	3.5	12.9	0.3	6.7	0.5	0.0	0.2	23.2
December	348.0	343.1	4.9	0.0	0.3	1.6	0.0	0.2	1.7	129.5	73.0	28.8	3.5	12.9	0.3	6.7	0.5	0.0	0.2	23.2
Total Grains 1/																				
1988/89	1,562.7	1,358.5	204.2	35.7	17.2	164.1	15.2	106.2	183.8	298.0	148.6	32.7	18.2	18.5	16.0	40.0	21.4	16.6	25.2	201.3
1989/90 prel.	1,677.9	1,395.9	282.0	48.0	18.5	161.7	16.7	112.4	198.8	311.5	155.2	33.9	20.4	17.9	18.7	34.0	21.7	12.1	19.2	195.3
1990/91 proj.																				
November	1,758.4	1,448.5	309.9	56.6	18.7	158.8	18.2	105.5	223.7	326.1	159.3	33.8	20.7	16.8	21.8	35.9	22.8	11.2	22.7	196.0
December	1,763.0	1,453.1	309.9	57.8	19.1	159.7	18.3	105.5	223.7	328.7	159.3	33.8	20.7	16.9	21.8	35.6	22.9	9.6	23.1	196.5
Oilseeds 2/																				
1988/89	202.9	152.5	50.3	5.9	1.0	11.5	0.6	5.1	12.7	30.6	19.0	2.0	3.2	0.8	10.7	24.6	0.8	0.8	2.3	21.0
1989/90 prel.	211.5	152.3	59.2	4.9	1.4	11.0	0.7	6.0	13.4	28.4	18.6	2.0	3.3	0.9	15.9	20.7	2.4	1.0	2.3	19.5
1990/91 proj.																				
November	217.5	157.8	59.7	5.6	1.0	12.4	0.8	5.3	13.6	32.2	18.8	2.1	3.4	0.9	15.8	20.0	0.9	1.0	2.0	22.1
December	216.4	156.5	59.9	5.7	0.9	12.3	0.8	5.3	13.6	32.2	18.8	2.1	3.4	0.7	15.3	19.5	0.9	0.8	2.1	22.0
	——Million 480-Pound Bales——																			
Cotton																				
1988/89	84.7	69.3	15.4	0.0	1.4	1.6	0.0	0.1	12.7	19.1	8.3	0.0	6.5	0.2	0.9	3.4	1.3	0.4	3.0	10.5
1989/90 prel.	79.9	67.7	12.2	0.0	0.8	1.5	0.0	0.1	12.3	17.4	10.3	0.0	6.7	0.2	1.3	3.0	1.4	0.3	2.8	9.7
1990/91 proj.																				
November	86.7	71.8	14.9	0.0	0.8	1.6	0.0	0.1	12.4	19.3	10.4	0.0	7.0	0.2	1.4	3.4	1.6	0.3	2.9	10.5
December	87.2	71.8	15.4	0.0	0.8	1.6	0.0	0.1	12.4	19.3	10.4	0.0	7.0	0.2	1.4	3.4	1.6	0.2	3.0	10.5

1/ Includes total of wheat, coarse grains, and rice (milled) shown above. Estimates of Soviet total grain production, including wheat, coarse grains, rice (rough), minor grains and pulses are 195.1 million tons in 1988/89, 210.9 million in 1989/90, and 235.0 million forecast in 1990/91.
2/ Totals for major regions and countries include the six major oilseeds shown elsewhere in this report, while world and total foreign also include copra and palm kernels for all countries.
Note: Entries of 0.0 indicate no reported or insignificant production.

DECEMBER 1990

Production Estimates and Crop Assessment Division, FAS, USDA

TABLE 3

Wheat Area, Yield, and Production
World and Selected Countries and Regions

COUNTRY/REGION	AREA			YIELD				PRODUCTION			
	1988/89	Prel. 1989/90	Proj. 1990/91	1988/89	Prel. 1989/90	1990/91 Nov.	Proj. Dec.	1988/89	Prel. 1989/90	1990/91 Nov.	Proj. Dec.
	---Million Hectares---			---Metric Tons Per Hectare---				---Million Metric Tons---			
World	218.0	225.5	231.2	2.29	2.38	2.57	2.57	500.3	536.5	593.2	594.3
United States	21.5	25.2	28.1	2.29	2.20	2.66	2.66	49.3	55.4	74.7	74.7
Total Foreign	196.5	200.4	203.1	2.30	2.40	2.56	2.56	451.0	481.1	518.5	519.7
Maj. Foreign Exporters	42.1	44.3	45.6	2.69	2.87	3.06	3.07	113.1	127.2	139.5	140.1
Argentina	4.7	5.5	6.0	1.79	1.86	2.00	2.00	8.4	10.2	12.0	12.0
Australia	8.9	8.9	9.9	1.58	1.58	1.55	1.57	14.1	14.1	15.5	15.5
Canada	13.0	13.6	14.1	1.23	1.80	2.20	2.26	16.0	24.6	31.0	31.8
EC-12	15.5	16.3	15.7	4.82	4.82	5.22	5.15	74.7	78.3	81.0	80.8
Major Importers	95.9	97.2	97.9	2.39	2.49	2.69	2.69	229.3	242.3	262.8	263.0
Brazil	3.5	3.4	3.3	1.68	1.65	1.27	1.06	5.8	5.6	3.8	3.5
China	28.8	29.8	30.3	2.97	3.04	3.17	3.18	85.4	90.8	96.0	96.5
Eastern Europe	10.7	10.7	10.7	4.17	4.15	4.16	4.16	44.8	44.2	44.4	44.4
Egypt	0.6	0.6	0.7	4.76	5.05	5.71	5.71	2.8	3.2	4.0	4.0
Other N. Africa 1/	4.0	4.7	5.2	1.26	1.13	1.08	1.08	5.0	5.3	5.6	5.6
Japan	0.3	0.3	0.3	3.62	3.43	3.77	3.77	1.0	1.0	1.0	1.0
USSR	48.1	47.7	47.5	1.76	1.94	2.27	2.27	84.4	92.3	108.0	108.0
Other Foreign	58.5	58.9	59.6	1.86	1.89	1.95	1.96	108.6	111.6	116.2	116.6
India	23.1	24.1	23.7	2.00	2.24	2.28	2.28	46.2	54.0	54.0	54.0
Iran	6.6	6.0	6.1	1.11	0.97	1.00	1.00	7.3	5.8	6.1	6.1
Mexico	0.8	1.0	0.9	4.00	4.21	4.12	4.59	3.2	4.0	3.5	3.9
Non-EC W. Europe	0.8	0.8	0.9	4.85	5.19	5.45	5.46	3.8	4.4	5.0	5.0
Pakistan	7.3	7.7	7.8	1.73	1.87	1.84	1.84	12.7	14.4	14.3	14.3
South Africa	2.0	1.8	1.7	1.78	1.09	1.12	1.06	3.5	2.0	1.9	1.8
Turkey	8.8	8.7	8.8	1.71	1.32	1.60	1.60	15.0	11.5	14.0	14.0
Others	9.3	8.8	9.8	1.82	1.77	1.78	1.79	16.9	15.5	17.4	17.5

1/ Algeria, Libya, Morocco, and Tunisia.

DECEMBER 1990

Production Estimates and Crop Assessment Division, FAS, USDA

TABLE 4

Coarse Grains Area, Yield, and Production
World and Selected Countries and Regions

COUNTRY/REGION	AREA			YIELD				PRODUCTION			
		Prel.	Proj.		Prel.	1990/91 Proj.			Prel.	1990/91 Proj.	
	1988/89	1989/90	1990/91	1988/89	1989/90	Nov.	Dec.	1988/89	1989/90	Nov.	Dec.
TOTAL COARSE GRAINS	---Million Hectares---			---Metric Tons Per Hectare---				---Million Metric Tons---			
World	326.1	323.4	322.0	2.24	2.48	2.54	2.55	731.4	800.6	820.0	820.7
United States	32.8	37.1	36.4	4.56	5.97	6.33	6.33	149.7	221.5	230.4	230.4
Total Foreign	293.3	286.4	285.6	1.98	2.02	2.06	2.07	581.7	579.1	589.6	590.3
Maj. Foreign Exporters	20.7	21.4	21.1	2.47	2.47	2.56	2.57	51.1	53.0	55.1	54.3
Argentina	2.9	3.1	3.3	2.49	2.65	2.85	2.85	7.3	8.3	9.5	9.5
Australia	4.3	4.0	4.4	1.56	1.71	1.58	1.58	6.7	6.9	6.8	6.9
Canada	7.1	8.3	8.0	2.76	2.84	3.17	3.24	19.7	23.5	25.6	26.0
South Africa	4.6	4.4	3.8	2.86	2.27	2.11	2.05	13.0	10.0	9.3	7.8
Thailand	1.8	1.6	1.5	2.50	2.71	2.71	2.67	4.4	4.2	3.9	4.0
Major Importers	106.3	103.8	101.2	2.57	2.72	2.77	2.79	273.4	282.7	280.7	282.0
Eastern Europe	18.2	18.2	18.1	3.37	3.74	3.36	3.36	61.3	68.0	60.9	60.9
EC-12	19.2	18.6	17.7	4.60	4.42	4.31	4.37	88.1	82.0	76.3	77.4
Other W. Europe	3.2	3.1	3.0	3.52	3.97	4.32	4.40	11.4	12.4	13.2	13.3
Mexico	7.5	7.5	7.9	1.85	1.88	1.89	1.89	13.8	14.1	15.0	15.0
USSR	57.8	56.0	54.0	1.69	1.87	2.11	2.11	97.5	104.8	114.0	114.0
Other Major Import. 2/	0.5	0.4	0.4	3.40	3.34	3.34	3.34	1.5	1.4	1.4	1.4
Other Foreign	166.3	161.2	163.3	1.55	1.51	1.56	1.56	257.1	243.5	253.8	254.1
Brazil	13.4	12.8	13.6	2.00	1.81	1.92	1.88	26.7	23.1	25.4	25.4
China	28.3	28.5	29.2	3.33	3.32	3.52	3.52	94.2	94.6	102.7	102.7
India	39.1	38.6	39.4	0.81	0.81	0.82	0.82	31.7	31.2	32.3	32.3
Indonesia	2.9	2.6	2.8	1.82	1.85	1.79	1.79	5.2	4.8	5.0	5.0
Nigeria	10.1	9.9	9.7	0.84	0.82	0.79	0.79	8.5	8.1	7.7	7.7
Philippines	3.8	3.6	3.7	1.21	1.24	1.24	1.24	4.5	4.5	4.6	4.6
Turkey	4.4	4.4	4.5	2.29	1.70	1.91	1.99	10.0	7.5	8.5	8.9
Others	64.5	60.8	60.5	1.18	1.14	1.11	1.11	76.2	69.6	67.6	67.5
BARLEY											
World	78.2	75.0	74.3	2.15	2.26	2.42	2.44	167.8	169.5	179.3	180.9
United States	3.1	3.4	3.1	2.04	2.62	2.97	2.97	6.3	8.8	9.1	9.1
Total Foreign	75.1	71.6	71.2	2.15	2.24	2.39	2.41	161.5	160.7	170.2	171.8
Australia	2.2	2.4	2.5	1.48	1.73	1.55	1.55	3.3	4.1	3.8	3.9
Canada	4.2	4.7	4.6	2.46	2.50	2.88	2.93	10.2	11.7	13.2	13.5
China	3.7	3.3	3.3	1.67	1.74	1.73	1.73	6.2	5.7	5.7	5.7
Eastern Europe	4.5	4.5	4.6	3.77	4.25	4.11	4.11	17.1	19.3	18.9	18.9
EC-12	12.2	11.8	11.5	4.13	3.93	3.92	4.00	50.2	46.2	44.8	45.9
Other W. Europe	1.7	1.5	1.5	3.28	3.87	4.12	4.26	5.7	5.9	6.2	6.2
Turkey	3.3	3.4	3.4	2.12	1.46	1.76	1.76	7.0	4.9	6.0	6.0
USSR	29.7	27.6	26.0	1.50	1.75	2.19	2.19	44.5	48.5	57.0	57.0
Others	13.5	12.5	13.9	1.28	1.16	1.06	1.06	17.3	14.5	14.7	14.7

FOOTNOTES AT END OF TABLE

CONTINUED

TABLE 4 (Continued)

Coarse Grains Area, Yield, and Production
World and Selected Countries and Regions

COUNTRY/REGION	AREA			YIELD				PRODUCTION			
	1988/89	Prel. 1989/90	Proj. 1990/91	1988/89	Prel. 1989/90	1990/91 Proj. Nov.	Dec.	1988/89	Prel. 1989/90	1990/91 Proj. Nov.	Dec.
CORN	---Million Hectares---			---Metric Tons Per Hectare---				---Million Metric Tons---			
World	125.1	126.3	127.2	3.20	3.65	3.67	3.67	400.7	461.1	468.4	467.4
United States	23.6	26.2	27.0	5.31	7.29	7.47	7.47	125.2	191.2	201.6	201.6
Total Foreign	101.5	100.1	100.2	2.71	2.70	2.65	2.65	275.5	269.9	266.9	265.8
Maj. Foreign Exporters	7.1	6.7	6.3	3.05	2.75	2.73	2.75	21.6	18.4	18.7	17.2
Argentina	1.7	1.7	2.0	2.94	3.06	3.33	3.33	5.0	5.2	6.5	6.5
South Africa	3.8	3.6	3.0	3.28	2.56	2.36	2.33	12.4	9.2	8.5	7.0
Thailand	1.6	1.4	1.3	2.63	2.86	2.85	2.85	4.2	4.0	3.7	3.7
Major Importers	22.0	21.2	20.9	3.82	3.95	3.44	3.44	83.9	83.8	71.9	71.8
Eastern Europe	7.1	7.1	6.9	3.78	4.21	3.31	3.31	26.9	29.8	22.9	22.9
EC-12	4.1	3.9	3.5	7.00	6.91	6.45	6.43	28.5	26.8	22.2	22.2
Other W. Europe	0.2	0.2	0.2	8.55	7.68	7.43	7.43	1.9	1.7	1.6	1.6
Mexico	6.0	5.8	6.2	1.68	1.68	1.72	1.72	10.1	9.8	10.7	10.7
USSR	4.4	4.1	4.0	3.62	3.71	3.50	3.50	16.0	15.3	14.0	14.0
Other Maj. Import. 2/	0.1	0.1	0.1	4.20	4.17	4.14	4.14	0.4	0.5	0.5	0.5
Other Foreign	72.5	72.2	73.0	2.34	2.32	2.42	2.42	170.0	167.8	176.3	176.8
Brazil	12.9	12.2	13.0	2.02	1.82	1.93	1.88	26.1	22.2	24.5	24.5
Canada	1.0	1.0	1.0	5.47	6.36	6.54	7.00	5.4	6.4	6.8	7.0
China	19.7	20.4	21.0	3.93	3.88	4.10	4.10	77.4	78.9	86.0	86.0
Egypt	0.8	0.8	0.9	5.20	5.37	5.41	5.41	4.3	4.5	4.6	4.6
India	5.9	6.0	6.0	1.40	1.33	1.33	1.33	8.3	8.0	8.0	8.0
Indonesia	2.9	2.6	2.8	1.82	1.85	1.79	1.79	5.2	4.8	5.0	5.0
Philippines	3.8	3.6	3.7	1.21	1.24	1.24	1.24	4.5	4.5	4.6	4.6
Zimbabwe	1.2	1.2	1.2	1.56	1.67	1.74	1.74	1.9	2.0	2.0	2.0
Others	24.3	24.4	23.5	1.52	1.49	1.47	1.49	36.9	36.4	34.8	35.1
SORGHUM											
World	42.6	42.3	40.8	1.31	1.31	1.32	1.32	55.5	55.6	53.7	53.8
United States	3.7	4.5	3.7	4.00	3.48	3.80	3.80	14.6	15.7	14.2	14.2
Total Foreign	38.9	37.8	37.1	1.05	1.06	1.06	1.07	40.9	39.9	39.4	39.5
Argentina	0.6	0.7	0.7	2.33	2.86	3.00	3.00	1.4	2.0	2.1	2.1
Australia	0.6	0.4	0.6	1.99	2.27	2.00	2.00	1.3	0.9	1.2	1.2
China	1.8	1.8	1.8	3.14	2.94	3.22	3.22	5.6	5.4	5.8	5.8
India	14.8	15.5	15.3	0.71	0.74	0.75	0.75	10.5	11.5	11.5	11.5
Mexico	1.1	1.3	1.3	2.83	2.88	2.85	2.85	3.1	3.8	3.7	3.7
Nigeria	4.4	4.4	4.4	0.80	0.80	0.75	0.75	3.5	3.5	3.3	3.3
South Africa	0.3	0.3	0.3	1.58	1.65	1.65	1.65	0.4	0.5	0.5	0.5
Sudan	5.3	3.5	3.0	0.83	0.64	0.50	0.50	4.4	2.3	1.5	1.5
Thailand	0.2	0.2	0.2	1.35	1.44	1.43	1.39	0.2	0.2	0.2	0.3
Others	9.8	9.7	9.5	1.07	1.02	1.01	1.02	10.4	9.9	9.6	9.7

FOOTNOTES AT END OF TABLE

CONTINUED

TABLE 4 (Continued)

Coarse Grains Area, Yield, and Production
World and Selected Countries and Regions

COUNTRY/REGION	AREA			YIELD				PRODUCTION			
		Prel.	Proj.		Prel.	1990/91 Proj.			Prel.	1990/91 Proj.	
	1988/89	1989/90	1990/91	1988/89	1989/90	Nov.	Dec.	1988/89	1989/90	Nov.	Dec.
OATS	---Million Hectares---			---Metric Tons Per Hectare---				---Million Metric Tons---			
World	22.1	22.7	21.7	1.70	1.84	1.98	1.98	37.5	41.8	42.9	42.9
United States	2.2	2.8	2.4	1.41	1.95	2.16	2.16	3.2	5.4	5.2	5.2
Total Foreign	19.9	19.9	19.2	1.73	1.83	1.96	1.96	34.3	36.4	37.7	37.7
USSR	10.9	10.8	10.5	1.40	1.57	1.67	1.67	15.3	16.8	17.5	17.5
Maj. Foreign Exporters	3.5	3.7	3.5	1.91	1.97	2.12	2.11	6.6	7.3	7.4	7.3
Argentina	0.4	0.4	0.5	1.27	1.44	1.33	1.33	0.5	0.6	0.6	0.6
Australia	1.3	1.1	1.2	1.40	1.44	1.38	1.38	1.9	1.6	1.6	1.6
Canada	1.4	1.7	1.5	2.18	2.08	2.36	2.33	3.0	3.5	3.5	3.5
Sweden	0.4	0.4	0.4	3.14	3.54	4.51	4.51	1.3	1.5	1.6	1.6
Other Foreign	5.4	5.5	5.3	2.28	2.25	2.42	2.44	12.4	12.3	12.8	12.9
China	0.6	0.6	0.6	1.19	1.15	1.21	1.21	0.7	0.6	0.7	0.7
Eastern Europe	1.4	1.4	1.3	2.62	2.69	2.80	2.80	3.7	3.7	3.7	3.7
East Germany	0.1	0.1	0.2	3.43	3.33	4.00	4.00	0.5	0.5	0.6	0.6
Poland	0.9	0.8	0.7	2.61	2.72	2.78	2.78	2.2	2.2	2.1	2.1
EC-12	1.8	1.7	1.6	3.11	2.78	3.05	3.09	5.5	4.7	4.8	4.9
France	0.3	0.3	0.2	3.77	3.78	3.80	3.80	1.0	1.0	0.9	0.9
West Germany	0.6	0.5	0.5	4.23	3.78	4.37	4.37	2.4	1.9	2.1	2.1
Finland	0.4	0.4	0.5	2.21	3.24	3.59	3.67	0.9	1.4	1.6	1.7
Norway	0.1	0.1	0.1	3.02	3.13	4.58	4.58	0.4	0.4	0.6	0.6
Others	1.2	1.3	1.2	1.09	1.10	1.11	1.11	1.3	1.4	1.4	1.4
RYE											
World	15.9	16.9	16.8	2.08	2.21	2.31	2.31	33.0	37.4	38.7	38.7
United States	0.2	0.2	0.2	1.55	1.77	1.70	1.70	0.4	0.3	0.3	0.3
Total Foreign	15.6	16.7	16.6	2.09	2.22	2.31	2.32	32.6	37.1	38.4	38.4
USSR	10.1	10.7	10.5	1.83	1.87	2.00	2.00	18.5	20.1	21.0	21.0
Maj. Foreign Exporter											
Canada	0.3	0.5	0.5	1.04	1.74	1.73	1.74	0.3	0.9	0.9	0.9
Other Foreign											
Eastern Europe	3.9	3.9	4.0	2.59	2.96	2.91	2.91	10.0	11.6	11.7	11.7
East Germany	0.6	0.6	0.6	2.94	3.34	3.44	3.44	1.8	2.1	2.1	2.1
Poland	2.9	2.9	3.1	2.52	2.95	2.84	2.84	7.2	8.6	8.7	8.7
Czechoslovakia	0.2	0.2	0.2	3.42	3.42	3.42	3.42	0.5	0.5	0.5	0.5
EC-12	0.9	1.0	1.0	3.05	3.31	3.45	3.48	2.9	3.2	3.3	3.4
Denmark	0.1	0.1	0.1	4.52	4.80	4.78	5.09	0.4	0.5	0.6	0.6
West Germany	0.4	0.4	0.4	4.19	4.69	4.72	4.72	1.6	1.8	2.0	2.0
Others	0.5	0.6	0.6	2.06	2.28	2.50	2.51	1.0	1.3	1.4	1.4

1/ Total of barley, corn, sorghum, oats, and rye shown below, plus millet and mixed grain.
2/ Japan, Republic of Korea, and Taiwan.

DECEMBER 1990 *Production Estimates and Crop Assessment Division, FAS, USDA*

TABLE 5

Rice Area, Yield, and Production
World and Selected Countries and Regions

	AREA			YIELD				PRODUCTION (Rough Basis)				MILLING RATE				PRODUCTION (Milled Basis)			
	1988/89	Prel. 1989/90	Proj. 1990/91	1988/89	Prel. 1989/90	1990/91 Nov.	Proj. Dec.	1988/89	Prel. 1989/90	1990/91 Nov.	Proj. Dec.	1988/89	Prel. 1989/90	1990/91 Nov.	Proj. Dec.	1988/89	Prel. 1989/90	1990/91 Nov.	Proj. Dec.
	—Million Hectares—			—Metric Tons Per Hectare—				—Million Metric Tons—				—In Percent—				—Million Metric Tons—			
World	145.6	146.2	145.8	3.4	3.4	3.5	3.5	489.0	503.3	511.4	514.0	67.7	67.7	67.5	67.7	331.0	340.8	345.2	348.0
United States	1.2	1.1	1.1	6.2	6.4	6.2	6.2	7.3	7.0	7.0	7.0	71.5	73.0	70.0	70.0	5.2	5.1	4.9	4.9
Total Foreign	144.5	145.1	144.7	3.3	3.4	3.5	3.5	481.7	496.3	504.4	507.0	67.6	67.7	67.5	67.5	325.8	335.7	340.3	343.1
Maj. Foreign Exporters	16.5	17.0	16.9	2.3	2.3	2.3	2.3	38.6	39.1	38.8	38.8	64.1	64.0	63.9	63.9	24.7	25.0	24.8	24.8
Burma	4.5	4.7	4.9	2.8	2.9	2.9	2.9	12.5	13.5	14.0	14.0	60.0	60.0	60.0	60.0	7.5	8.1	8.4	8.4
Pakistan	2.0	2.1	2.1	2.4	2.3	2.6	2.5	4.8	4.8	5.3	5.3	66.7	66.7	66.7	66.7	3.2	3.2	3.5	3.5
Thailand	9.9	10.2	9.9	2.1	2.0	2.0	2.0	21.3	20.8	19.5	19.5	66.0	66.0	66.0	66.0	14.0	13.7	12.9	12.9
Major Importers	13.0	13.7	13.3	4.3	4.3	4.4	4.4	55.8	58.4	57.6	57.9	66.2	66.1	66.1	66.1	36.9	38.6	38.1	38.3
EC–12	0.3	0.3	0.4	5.6	6.2	6.0	6.3	2.0	2.1	2.2	2.3	67.3	67.0	67.3	67.3	1.3	1.4	1.5	1.6
Indonesia	9.8	10.4	10.0	4.3	4.3	4.5	4.5	42.3	44.8	44.3	44.3	65.0	65.0	65.0	65.0	27.5	29.1	28.8	28.8
Nigeria	0.6	0.6	0.7	1.3	1.4	1.5	1.5	0.8	0.9	1.0	1.0	66.5	66.5	66.5	66.5	0.6	0.6	0.6	0.6
Republic of Korea	1.3	1.3	1.2	6.6	6.5	6.4	6.3	8.4	8.2	7.6	7.8	72.3	72.0	72.0	72.0	6.1	5.9	5.5	5.6
Other Maj. Import. 1/	1.0	1.0	1.1	2.3	2.4	2.3	2.3	2.3	2.5	2.5	2.5	65.4	65.5	65.5	65.5	1.5	1.6	1.6	1.6
Other Foreign	114.9	114.4	114.5	3.4	3.5	3.6	3.6	387.3	398.8	408.0	410.3	68.2	68.2	68.0	68.2	264.1	272.1	277.5	280.0
Australia	0.1	0.1	0.1	8.2	7.8	8.2	8.2	0.8	0.9	0.7	0.7	71.5	71.5	71.5	71.5	0.6	0.6	0.5	0.5
Bangladesh	10.2	10.7	10.6	2.3	2.5	2.5	2.5	23.3	27.0	27.0	27.0	66.7	66.7	66.7	66.7	15.6	18.0	18.0	18.0
Brazil	5.3	4.2	4.8	2.1	1.9	2.0	2.0	11.0	7.9	9.8	9.8	68.0	68.0	68.0	68.0	7.5	5.4	6.7	6.7
China	31.9	32.7	32.4	5.3	5.5	5.6	5.7	169.1	180.1	182.0	185.0	70.0	70.0	70.0	70.0	118.4	126.1	127.4	129.5
India	41.9	41.5	41.8	2.5	2.5	2.6	2.6	106.0	105.0	109.5	109.5	66.7	66.7	66.7	66.7	70.7	70.0	73.0	73.0
Japan	2.1	2.1	2.1	5.9	6.2	6.2	6.4	12.4	12.9	12.9	13.2	72.8	72.8	72.8	72.8	9.0	9.4	9.4	9.6
Philippines	3.5	3.4	3.5	2.6	2.6	2.7	2.7	9.2	8.9	9.6	9.4	65.0	65.0	65.0	65.0	6.0	5.8	6.2	6.1
USSR	0.7	0.7	0.7	4.3	3.9	4.0	4.0	2.9	2.6	2.6	2.6	65.0	65.0	65.0	65.0	1.9	1.7	1.7	1.7
Vietnam	5.8	5.9	5.9	2.9	3.1	3.0	3.1	16.8	18.4	17.5	18.0	65.0	65.0	65.0	65.0	10.9	12.0	11.4	11.7
Others	13.5	13.1	12.8	2.6	2.7	2.8	2.7	35.8	35.1	36.3	35.1	66.2	66.2	63.8	66.2	23.7	23.2	23.2	23.2

1/ Hong Kong, Iran, Iraq, Ivory Coast, and Saudi Arabia.

December 1990

Production Estimates and Crop Assessment Division, FAS, USDA

TABLE 6

Oilseeds Area, Yield, and Production
World and Selected Countries and Regions

COUNTRY/REGION	AREA			YIELD				PRODUCTION			
		Prel.	Proj.		Prel.	1990/91 Proj.			Prel.	1990/91 Proj.	
	1988/89	1989/90	1990/91	1988/89	1989/90	Nov.	Dec.	1988/89	1989/90	Nov.	Dec.
	---Million Hectares---			---Metric Tons Per Hectare---				---Million Metric Tons---			
SOYBEANS											
World	55.78	57.76	55.07	1.71	1.84	1.91	1.91	95.51	106.01	105.85	105.15
United States	23.22	24.09	22.87	1.82	2.17	2.27	2.27	42.15	52.35	51.81	51.81
Total Foreign	32.56	33.67	32.19	1.64	1.59	1.66	1.66	53.36	53.66	54.03	53.33
Maj. Foreign Exporters	16.17	16.33	15.30	1.84	1.84	1.86	1.86	29.70	30.05	29.00	28.50
Argentina	4.00	4.95	5.10	1.63	2.17	2.06	2.06	6.50	10.75	10.50	10.50
Brazil	12.17	11.38	10.20	1.91	1.70	1.76	1.76	23.20	19.30	18.50	18.00
Other Foreign	16.39	17.34	16.89	1.44	1.36	1.48	1.47	23.66	23.61	25.03	24.83
Canada	0.53	0.54	0.50	2.16	2.26	2.60	2.63	1.15	1.22	1.30	1.33
China	8.12	8.06	7.63	1.43	1.27	1.51	1.51	11.65	10.23	11.50	11.50
Eastern Europe	0.56	0.54	0.54	1.20	1.50	1.30	1.30	0.67	0.82	0.70	0.70
EC-12	0.53	0.61	0.65	3.10	3.19	2.83	2.83	1.66	1.95	1.85	1.85
India	1.66	1.90	2.10	0.92	0.89	0.95	0.95	1.53	1.70	2.00	2.00
Indonesia	1.18	1.15	1.25	1.02	0.96	0.96	0.96	1.20	1.10	1.20	1.20
Paraguay	0.85	0.98	0.90	1.90	1.38	1.78	1.78	1.62	1.35	1.60	1.60
USSR	0.76	0.83	0.84	1.16	1.15	1.10	1.10	0.88	0.96	0.92	0.92
Others	2.20	2.73	2.48	1.51	1.57	1.55	1.51	3.32	4.29	3.96	3.74
COTTONSEED											
World	33.71	32.69	33.94	0.96	0.94	0.99	0.99	32.38	30.72	33.51	33.53
United States	4.84	3.86	4.66	1.14	1.10	1.13	1.17	5.50	4.24	5.27	5.44
Total Foreign	28.88	28.83	29.28	0.93	0.92	0.96	0.96	26.88	26.47	28.25	28.09
China	5.53	5.20	5.50	1.27	1.24	1.30	1.30	7.05	6.44	7.14	7.14
India	7.30	7.60	7.80	0.49	0.59	0.58	0.58	3.56	4.49	4.53	4.53
Pakistan	2.51	2.60	2.71	1.14	1.12	1.13	1.13	2.85	2.91	3.06	3.06
USSR	3.43	3.33	3.15	1.46	1.41	1.56	1.56	5.00	4.70	4.93	4.93
Others	10.11	10.09	10.12	0.83	0.79	0.84	0.83	8.42	7.94	8.59	8.44
PEANUTS											
World	19.71	19.36	19.11	1.18	1.11	1.12	1.11	23.18	21.44	21.44	21.28
United States	0.66	0.67	0.72	2.74	2.72	2.19	2.18	1.81	1.81	1.57	1.57
Total Foreign	19.05	18.69	18.40	1.12	1.05	1.07	1.07	21.37	19.63	19.88	19.72
Argentina	0.15	0.18	0.19	1.62	2.06	2.32	2.32	0.24	0.37	0.43	0.43
China	2.91	2.96	3.05	1.95	1.79	1.90	1.90	5.69	5.30	5.80	5.80
India	8.43	8.40	7.90	1.07	0.92	0.92	0.92	9.00	7.70	7.30	7.30
Senegal	0.90	0.79	0.77	0.76	0.93	0.78	0.78	0.69	0.74	0.60	0.60
South Africa	0.15	0.09	0.08	1.07	1.35	1.26	1.25	0.16	0.12	0.24	0.10
Sudan	0.58	0.55	0.54	0.78	0.73	0.60	0.60	0.45	0.40	0.33	0.33
Others	5.92	5.73	5.87	0.87	0.87	0.88	0.88	5.13	5.00	5.18	5.16

CONTINUED

TABLE 6 (Continued)

Oilseeds Area, Yield, and Production
World and Selected Countries and Regions

COUNTRY/REGION	AREA			YIELD				PRODUCTION			
		Prel.	Proj.		Prel.	1990/91 Proj.			Prel.	1990/91 Proj.	
	1988/89	1989/90	1990/91	1988/89	1989/90	Nov.	Dec.	1988/89	1989/90	Nov.	Dec.
	---Million Hectares---			---Metric Tons Per Hectare---				---Million Metric Tons---			
SUNFLOWERSEED											
World	14.90	15.72	16.08	1.37	1.39	1.36	1.37	20.36	21.86	22.29	21.96
United States	0.78	0.72	0.75	1.05	1.10	1.27	1.27	0.81	0.80	0.96	0.96
Total Foreign	14.13	15.00	15.32	1.38	1.40	1.36	1.37	19.54	21.06	21.33	21.01
Argentina	2.20	2.80	2.40	1.45	1.36	1.36	1.42	3.20	3.80	3.80	3.40
China	0.83	0.73	0.83	1.42	1.34	1.45	1.45	1.18	0.98	1.20	1.20
EC-12	2.16	2.11	2.55	1.84	1.66	1.60	1.60	3.99	3.50	4.08	4.08
East Europe	1.31	1.29	1.29	1.62	1.87	1.71	1.71	2.13	2.42	2.20	2.20
USSR	4.28	4.46	4.55	1.44	1.59	1.54	1.54	6.16	7.07	7.00	7.00
Others	3.34	3.61	3.71	0.87	0.91	0.83	0.84	2.89	3.29	3.05	3.12
RAPESEED											
World	17.88	16.89	17.49	1.26	1.28	1.36	1.36	22.53	21.57	23.82	23.82
Total Foreign	17.88	16.89	17.49	1.26	1.28	1.36	1.36	22.53	21.57	23.82	23.82
Canada	3.67	2.90	2.63	1.17	1.07	1.25	1.26	4.31	3.10	3.30	3.33
China	4.94	4.99	5.30	1.02	1.09	1.25	1.25	5.04	5.44	6.60	6.60
EC-12	1.84	1.66	1.95	2.81	2.96	2.95	2.94	5.17	4.92	5.77	5.74
East Europe	0.88	1.00	0.94	2.51	2.65	2.39	2.39	2.20	2.65	2.26	2.26
India	4.87	4.70	4.80	0.86	0.81	0.83	0.83	4.20	3.80	4.00	4.00
Others	1.69	1.63	1.86	0.95	1.02	1.02	1.02	1.61	1.67	1.90	1.90
FLAXSEED											
World	3.68	3.68	3.75	0.45	0.52	0.62	0.62	1.66	1.91	2.32	2.32
United States	0.09	0.07	0.09	0.45	0.47	0.89	0.89	0.04	0.03	0.08	0.08
Total Foreign	3.59	3.61	3.66	0.45	0.52	0.61	0.61	1.62	1.88	2.24	2.23
Argentina	0.54	0.58	0.58	0.86	0.90	0.88	0.83	0.46	0.52	0.52	0.48
Canada	0.50	0.60	0.73	0.74	0.83	1.25	1.29	0.37	0.50	0.90	0.94
India	1.18	1.20	1.20	0.30	0.33	0.33	0.33	0.35	0.40	0.40	0.40
USSR	1.04	0.87	0.78	0.21	0.26	0.21	0.21	0.22	0.23	0.17	0.17
Others	0.33	0.36	0.37	0.66	0.66	0.68	0.68	0.22	0.24	0.25	0.25
MAJOR OILSEEDS	*145.66*	*146.10*	*145.43*	*1.34*	*1.39*	*1.43*	*1.43*	*195.62*	*203.51*	*209.24*	*208.06*
United States	29.58	29.42	29.10	1.70	2.01	2.05	2.06	50.31	59.24	59.69	59.86
Total Foreign	116.08	116.68	116.33	1.25	1.24	1.28	1.27	145.31	144.27	149.55	148.20
COPRA	--	--	--	--	--	--	--	4.32	4.67	4.86	4.88
PALM KERNEL	--	--	--	--	--	--	--	2.91	3.37	3.40	3.43
TOTAL OILSEEDS	--	--	--	--	--	--	--	*202.86*	*211.55*	*217.50*	*216.37*
PALM OIL 1/	--	--	--	--	--	--	--	9.47	10.94	11.21	11.21

1/ Not included in total oilseeds.

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TABLE 7

Cotton Area, Yield, and Production
World and Selected Countries and Regions

COUNTRY/REGION	AREA			YIELD				PRODUCTION			
		Prel.	Proj.		Prel.	1990/91 Proj.			Prel.	1990/91 Proj.	
	1988/89	1989/90	1990/91	1988/89	1989/90	Nov.	Dec.	1988/89	1989/90	Nov.	Dec.
	---Million Hectares---			---Kilograms Per Hectare---				---Million 480-Pound Bales---			
World	33.8	32.3	33.6	546	539	561	565	84.7	79.9	86.7	87.2
United States	4.8	3.9	4.7	694	688	698	719	15.4	12.2	14.9	15.4
Total Foreign	28.9	28.4	28.9	521	519	539	541	69.3	67.7	71.8	71.8
Maj. Foreign Exporters	13.5	13.1	13.2	749	729	761	764	46.5	43.7	46.3	46.4
Australia	0.2	0.2	0.3	1,475	1,406	1290	1,290	1.3	1.4	1.6	1.6
Central America 1/	0.1	0.1	0.1	813	879	825	825	0.4	0.3	0.3	0.3
China	5.5	5.2	5.5	751	728	764	764	19.1	17.4	19.3	19.3
Egypt	0.4	0.4	0.4	718	695	742	742	1.4	1.3	1.5	1.5
Mexico	0.3	0.2	0.2	1,209	891	909	928	1.4	0.8	0.8	0.8
Pakistan	2.5	2.6	2.7	568	560	565	565	6.5	6.7	7.0	7.0
Sudan	0.3	0.3	0.2	443	454	467	467	0.6	0.6	0.5	0.5
Turkey	0.7	0.7	0.7	882	851	913	976	3.0	2.8	2.9	3.0
USSR	3.4	3.3	3.2	805	804	857	857	12.7	12.3	12.4	12.4
Major Importers 2/	0.4	0.4	0.4	837	889	890	908	1.7	1.5	1.7	1.6
Other Foreign	15.0	15.0	15.3	307	327	338	338	21.1	22.5	23.9	23.7
Argentina	0.5	0.6	0.6	389	486	459	459	0.9	1.3	1.4	1.4
Brazil	2.4	2.2	2.0	311	300	370	370	3.4	3.0	3.4	3.4
India	7.3	7.6	7.8	247	295	290	290	8.3	10.3	10.4	10.4
Syria	0.2	0.2	0.2	667	930	872	872	0.5	0.7	0.6	0.6
Others	4.6	4.4	4.7	377	351	370	369	8.1	7.2	8.1	7.9

1/ Nicaragua, Guatemala, El Salvador, Honduras, and Costa Rica.

2/ Western Europe, Eastern Europe, Japan, Hong Kong, Republic of Korea, and Taiwan.

December 1990

Production Estimates and Crop Assessment Division, FAS, USDA

TABLE 8

The table below presents a 9-year record of the difference between the December projections and the final estimates. Using world wheat production as an example, changes between the December projection and the final estimate have averaged 5.1 million tons (1.0 percent) and ranged from -10.2 to 6.1 million tons. The December projection has been below the final 6 times and above the final 3 times.

RELIABILITY OF PRODUCTION PROJECTIONS

COMMODITY AND REGION	PROJECTION AND FINAL ESTIMATES, 1981/82 - 1989/90 1/					
	Difference		Lowest	Highest	Below	Above
	Average	Average	Difference		Final	Final
	Percent	---*Million Metric Tons*---			Number of Years 2/	
WHEAT						
World	1.0	5.1	-10.2	6.1	6	3
U.S.	0.5	0.3	-1.2	0.1	6	3
Foreign	1.2	5.1	-10.3	6.3	6	3
COARSE GRAINS 3/						
World	0.9	7.0	-19.8	6.9	4	5
U.S.	1.5	3.0	-7.5	2.1	7	2
Foreign	1.0	5.7	-15.4	7.6	3	6
RICE (Milled)						
World	2.3	7.0	-16.2	1.1	7	2
U.S.	2.5	0.1	-0.2	0.2	5	2
Foreign	2.3	7.0	-16.2	1.2	7	2
SOYBEANS						
World	2.3	2.1	-4.4	3.8	4	5
U.S.	2.8	1.4	-2.7	2.1	2	7
Foreign	3.7	1.5	-2.1	1.7	4	5
		---*Million 480-lb. Bales*---				
COTTON						
World	2.1	1.7	-6.3	2.2	3	5
U.S.	1.8	0.2	-0.5	0.4	4	4
Foreign	2.4	1.7	-6.7	1.8	3	5
UNITED STATES		-------*Million Bushels*-------				
CORN	1.6	103	-250	94	7	2
SORGHUM	2.5	20	-53	14	5	4
BARLEY	1.9	9	-12	24	5	4
OATS	1.5	6	-18	16	6	2

1/ The final estimate for 1981/82-1988/89 is defined as the first November estimate following the marketing year and for 1989/90 last month's estimate.
2/ May not total nine if projection was the same as the final.
3/ Includes corn, sorghum, barley, oats, rye, millet, and mixed grain.

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Production Estimates and Crop Assessment Division, FAS, USDA

WORLD AGRICULTURAL WEATHER HIGHLIGHTS

DECEMBER 11, 1990

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

UNITED STATES

Soil moisture improves in most areas as winter grains enter dormancy in generally good condition. Warm, dry November weather benefits late harvesting in the eastern Corn Belt.

EUROPE

Seasonal rains favor winter grain planting across the southwest. Recent rain and snow ease long-term dryness in the Balkans. Seasonably cool temperatures harden and induce dormancy in winter grains in the northeast.

NORTHWESTERN AFRICA

Winter grain planting is usually well underway. Above-normal November precipitation in Algeria and Tunisia provides abundant topsoil moisture. Late-November rain covers northern Morocco but crop areas in the south remain too dry for planting.

WESTERN USSR

Unseasonable warm November weather favors winter grains but causes crops to enter dormancy later than usual. Early-December rain in the south boosts low soil moisture reserves.

EASTERN ASIA

Scattered rains ease dryness in the North China Plain. Recent cool weather hardens winter crops in the east. Mostly dry weather favors completion of late crop rice harvest in the south.

SOUTH ASIA

Seasonable dry, warm weather benefits maturing summer crops and favors winter wheat planting across Pakistan and India. Rain in southern India was limited to rice areas of the southeast coast.

SOUTHEAST ASIA

Dry weather benefits maturing Thai grains but flooding persists over Vietnam's coast. Typhoon Mike damages Philippine sugarcane and fall grains in early November. By early December, seasonable showers over Java promote rice planting.

SOUTH AMERICA

In Argentina, frequent showers provide adequate moisture for summer crop establishment. Recent drier weather promotes early wheat harvesting. In south-central Brazil, wetness slows soybean planting in the south; dryness concerns northern area; and generally favorable conditions help Parana's crop.

SOUTH AFRICA

Dry, warm weather in November inhibits corn planting over primary corn regions of the Maize Triangle. Planting rains in the east cover areas that usually account for less than 25 percent of the total crop. Recent showers improve planting conditions.

AUSTRALIA

Warm, dry weather favors rapid progress of winter grains harvest across the south. Unseasonable dryness continues to stress sugarcane and nonirrigated summer crops in the east.

(More details are available in the Weekly Weather and Crop Bulletin. Subscription information may be obtained by calling (202) 447-7917.

WEATHER BRIEFS

EUROPEAN USSR: ABOVE NORMAL TEMPERATURES

Temperatures ranged from 2 to 8 degrees Celsius above normal across European USSR from November 9 through December 11, 1990. The unseasonably warm weather was overall favorable for winter grains. However, a protective snow cover was lacking. The Central and Black Soils regions, the Volga Valley, the North Caucasus, and the eastern and northern Ukraine received normal to above-normal precipitation, and generally wet conditions continued in the Baltic States and Belorussia. Moldavia and the western and southern Ukraine received below-normal precipitation.

SOUTH AFRICA: RAINS IMPROVE PROSPECTS FOR CORN PLANTING

Widespread rain during December 5 and 6, 1990, stimulated corn planting across much of the South African Maize Triangle. Precipitation was generally around 50 millimeters (mm) across most of the Maize Triangle, with amounts slightly less in the west. One station reported 81 mm of rain. Dry conditions during the period of September through December 4, 1990, caused corn planting delays and emergence problems. Corn is normally planted in November and early December as rainfall usually increases during this period. This year, however, rainfall remained light and only drifted into the northeastern portion of the Maize Triangle on December 5. Corn planting was generally on time in the eastern portion of the Maize Triangle, where November soil moisture levels were generally adequate. The eastern portion of the Maize Triangle only accounts for about 25 percent of South Africa's corn production. Until December 5, 1990, soil moisture levels were short to very short over the rest of the corn growing region. A late start for a summer grain crop usually increases chances for stress due to high temperatures at the critical pollination stage.

HONDURAS: HEAVY RAINS DAMAGE CROPS

Heavy rains continued to inundate northern Honduras during the period of November 9 through December 11, 1990. Precipitation amounts have been above normal since early summer 1990 for countries in the western Gulf of Mexico. A series of storms since early November has brought heavy rains to northern and central Honduras causing flooding and damaging crops. Over 5,000 hectares of bananas and plantains have been reported damaged; 2,000 hectares are a complete loss. Losses to sugar cane could be high, since the north coast accounts for about 60 percent of Honduras' sugar production. Damage to rice and beans has been reported.

PRODUCTION BRIEFS

CANADA: RECORD GRAIN PRODUCTION

Total 1990/91 grain production is estimated at a record 57.8 million tons, 20 percent above last year and 2 percent above the previous record set in 1986/87, according to Statistics Canada. Final estimates of field crop production in Canada are based on a national survey of average yields obtained from 16,400 farm operators. Record production of spring wheat, durum wheat, and winter wheat in Ontario contributed significantly to the new record. With the exception of a portion of western Saskatchewan and eastern Alberta, where there was drought, excellent weather and timely rains helped produce high yields. Wheat quality is also well above average, with an estimated 90 percent of the spring wheat crop grading #1 or #2, versus the average of about 60 percent. Canada's corn and rye crops also were estimated to be new records based on above average yields and increased area. Fall rains, which delayed the corn harvest, probably caused some quality loss. The remaining coarse grains had bumper but not record crops.

SOUTH AFRICA: DROUGHT AFFECTS CROPS

Below average rainfall has been reported in the major crop producing areas of the Orange Free State, Transvaal, Natal, and Cape provinces since the beginning of the rainy season. The prolonged dry, hot weather has lessened both area and yields for most crops. The estimate for the 1990/91 wheat crop, now being harvested, was reduced again this month to 1.8 million tons. Planting of the 1990/91 corn crop has been delayed by the drought but corn planting can be extended into December. The late start has likely reduce yield potential. Farmers normally stagger planting dates and varieties to reduce their risk from weather related damage, but this year late plantings will make farmers more vulnerable. The forecast of harvested area for corn was reduced 17 percent from last month's estimate. Some of the unplanted area in the eastern regions may be planted to sorghum or sunflower. Cash flow and credit problems may also be having a negative effect on plantings by some farmers. On the plus side, the Maize Board announced recently that it will pay an unspecified premium for white corn, which is used for human consumption.

CHINA: RECORD GRAIN HARVEST IN 1990/91

The Chinese Government has announced that total grain production is expected to exceed 420 million tons in 1990/91, an increase of more than 15 million tons over last year's record crop and the largest year-to-year increase since 1984. The Government attributed the bumper grain harvest to a combination of factors including favorable weather, larger planted area (up more than 600,000 hectares), expanded use of high-yielding varieties, increases in agricultural investment and farm inputs, and supportive government policies. China also had bumper harvests of cotton, oilseeds, and sugar in 1990/91, unlike last year, when increases in grain area and production often occurred at the expense of these crops. Preliminary estimates indicate that total grain production increased in 20 of China's 30 provinces and districts, remained unchanged in five, and decreased in five.

PHILIPPINES: RICE CROP DAMAGED BY TYPHOON

On November 13 and 14, typhoon "Mike" hit the central Philippines near Iloilo. Although most of this region's rice crop was harvested in September, October, and early November, the U.S. agricultural attache in Manila reported an estimated 130,000-ton loss (milled basis) of the 1990/91 rice crop. In addition, the estimated harvested area was reduced by 45,000 hectares. This area likely will be replanted for the dry season, which has already commenced. Dry-season yields are expected to be lower than normal due to high fertilizer prices which will limit application rates.

CHINA: MORE RICE GROWN IN NORTHEAST

Rice production has increased rapidly over the last decade in Northeast China, where corn, sorghum, and soybeans are the traditional staple crops. Since 1980, paddy rice area has grown from less than 1 million hectares to 2.13 million hectares and now accounts for about 15 percent of total farm area. Annual production exceeds 15 million tons, about 30 percent of total grain output in the Northeast, and Heilongjiang Province has changed from a rice-importer to a rice-exporter. The expansion has been due to the development of new cold-resistant varieties and planting techniques, government investment in irrigation facilities, and higher prices that have made rice more profitable than corn or sorghum.

CHINA: COTTON PRODUCTION STIMULATED BY GOVERNMENT

Last year the government took several steps to encourage cotton production and ensure an adequate supply of cotton for the textile industry. It raised the purchase price of cotton 27 percent to 300 yuan/50 kg to make it more competitive with grain and other crops and announced tougher controls on cotton buying to prevent shortages and speculation. Unauthorized cotton markets were closed and private businessmen, textile enterprises, and joint ventures were forbidden from buying cotton directly from farmers under the new controls. A total of 2.3 million tons of cotton had been purchased from farmers through October 25, up 56 percent over the same time in 1989. Several provinces (Xinjiang, Hubei, Hunan, Sichuan, and Zhejiang) already had bought more cotton by that date than in all of last year. Despite booming procurement in most of China, some areas continue to have problems with cotton procurement because of insufficient State funds.

WEST GERMAN: SUGAR CROP REVISED UPWARD

The sugar production forecast for West Germany for 1990/91 has been revised to 3.7 million tons, up 0.1 million from last month, based on reports from the U.S. agricultural counselor in Bonn. An extraordinarily warm and sunny period in October resulted in higher sugarbeet yields and sucrose content. A record per hectare beet yield of 56 tons with a sugar yield of 8.6 tons (raw equivalent) is now expected. Comparable 1989 yields were 53 tons and 8.5 tons, respectively.

EAST GERMANY: LARGE SUGARBEET CROP EXPECTED

The sugarbeet crop in East Germany is forecast to be in the 8.0 to 8.5 million ton range according to the U.S. agricultural counselor in Bonn. The new forecast is based on reports that field yields are averaging 10 tons per hectare more than in 1989 when the national average was near 30 tons per hectare. The previous forecast was for a yield of 36 tons per hectare resulting in 7.0 million tons of harvested sugarbeets.

YUGOSLAVIA: SUGARBEET CROP DOWN SHARPLY

The 1990 sugarbeet crop in Yugoslavia is forecast at 5.3 million tons, down 15 percent from the previous forecast, according to the U.S. agricultural attache in Belgrade. Prolonged summer drought sharply reduced sugarbeet size and average yield to 33.6 tons per hectare, the lowest in a decade. However, area planted increased 10 percent over 1989 and the sugar content of the sugarbeets is reported to be higher than last year. These two factors will partially offset the negative effects of dry weather. The new forecast for 1990 sugar production (raw value) is 800,000 tons, down 100,000 tons from the previous forecast.

NORWAY: DAIRY OUTPUT INCREASES IN 1990

Milk production in Norway is expected to increase 2 percent to 1.93 million tons in 1990 according to a report from the U.S. agricultural attache in Copenhagen. The production increase for 1990 is due both to an increase in cow numbers, reported at 354,000 head, up 1 percent, and an increase in per cow yields, reported at 6,370 kilograms per cow. Norway's target for milk production is 1.85 million tons annually, so 1990's overproduction will bring further cuts in farm quotas and in the payment for overquota milk. Milk output in 1991 is forecast to decline by 4 percent to 1.85 million tons. Cheese output in 1990 is estimated at 86,000 tons, 1 percent above 1989, with the lower 1991 milk production forecast, output may drop to 80,000 tons. Output of butter in 1990 is estimated at 29,000 tons, up from 26,000 in 1989. Output in 1991 is forecast to drop back to the 1989 level.

AUSTRALIA: NEW WOOL PROGRAM

The Australian Wool Corporation (AWC), a quasi-government corporation, has developed a new plan to bring a better balance between supply and demand and to stabilize prices, according to the U.S. agricultural counselor in Canberra. Key elements of the plan include establishing delivery quotas for individual producers, a national 1991/92 quota of 750,000 tons, and a flock-reduction scheme. Individual quotas will be tradeable to reduce potentially adverse effects on efficiency. The provisional objective of the flock-reduction scheme will be to reduce the sheep flock by 15 to 20 million head, approximately 8 percent below current numbers. Overall the plan is expected to reduce 1991/92 deliveries by 50,000 tons or 6 percent of the quota.

The current crisis stems from the high prices of 1988/89 that led to overexpansion of sheep numbers and a decline in world demand. Weather this year resulted in favorable per head yields which has further magnified the problem. In late May the AWC, under government pressure, lowered the floor price from $A8.70 per kilogram to $A7.00, but that move failed to expand sales enough to stop the continual build-up in stocks. AWC stocks totaled 2.74 million bales in late May and by mid November they had grown to 4.4 million tons. The AWC has purchased approximately three quarters of the wool offered in recent weekly wool auctions because there were no other takers at or above the floor price.

KENYA: FRESH PINEAPPLE CROP LARGER THAN EXPECTED

As a result of continued good weather and an unexpected increase in both bearing and harvested area, prospects for fresh pineapple production in Kenya are much better than originally forecast. Area and production data for 1989, preliminary 1990 forecasts reported in April, and revised estimates as of December 1990 are as follows in hectares and metric tons:

KENYA: FRESH PINEAPPLE PRODUCTION

	Revised 1989	April 1990	December 1990
Area planted	5,830	5,830	6,330
Area harvested	4,480	4,220	4,520
Total production	212,330	212,000	226,000

AUSTRALIA: FORESTRY SITUATION

Prospects appear more favorable for Australia's forestry sector following the severe 1989 downturn in the industry, when the Government's tight monetary policy, high interest rates, increasing unemployment, and reduced building activity sent production levels of nearly all major wood products spiraling downward. The on-going recovery is expected to be moderate--only 2 percent over the 1989 annual cut, and sharply below the record volume of 17.6 million cubic meters (CUM) felled during 1988. Softwood log production for 1990 is estimated at 6.0 million CUM. Plantation forests planted to exotic and indigenous softwoods covered approximately 913,000 hectares by the end of 1989. The establishment of new softwood plantations has been occurring at an annual rate of about 38,000 hectares for the past several years. However, the declining availability of native hardwoods has placed renewed emphasis on afforestation of plantation land with hardwood species.

Production of softwood lumber is expected to exceed the 1989 level by 3 percent due to lower interest rates and an increase in home repair and remodeling projects. A similar gain is forecast for plywood production. Slack activity in the building and furniture industries is expected to reduce output of hardboard and particleboard for the second consecutive year.

However, the recent trend has been to relieve any shortages of these materials by using medium density fiberboard (MDF), which has proven to be an acceptable substitute for both hardboard and particleboard. Production of MDF for 1990 is forecast to reach a record 230,000 CUM.

AUSTRALIA: FORESTRY PRODUCTION
(1,000 Cubic Meters)

	1986	1987	1988	1989	1990 1/
Harvest	16,984	17,460	17,628	16,500	16,900
Wood chips 2/	5,020	5,108	5,196	4,774	5,225
Softwood logs	5,875	6,090	6,153	5,858	6,000
Softwood lumber	1,101	1,307	1,644	1,442	1,485
Poles, piles, posts, pitprops	393	400	271	250	250
Railroad ties/sleepers	195	150	140	127	127
Plywood	97	11	130	116	121
Hardboard	116	117	130	125	120
Medium density fiberboard	100	100	122	196	230
Insulation board	13	12	11	11	12
Particleboard	660	715	779	743	721

1/ Preliminary.
2/ Wood chips reported in 1,000 metric tons.

NEW ZEALAND: FORESTRY SITUATION

New Zealand's production of forest products is expected to reach record levels by the end of 1990. The timber harvest is currently forecast at 12.5 million cubic meters (CUM), 9 percent above the 1989 cut. Fellings are projected to accelerate over the next few years as an increasing proportion of the trees planted in the 1960's mature and the Government continues to sell off State forestland to private interests. Current projections indicate production of softwood logs, lumber, veneer, and plywood will increase commensurate with the rate of growth of roundwood removals, most of which are softwood radiata pine trees. However, the steadiest growth in the industry is occurring in the medium density fiberboard (MDF) sector. Production has expanded 85 percent since 1986. The unexpected increase in housing activity during late 1989 boosted domestic demand for MDF resulting in a record 1990 production forecast of 460,000 CUM. The one fairly static sector in the industry appears to be particleboard. Since particleboard mills are already operating near capacity, minor fluctuations in production are expected to be the norm for the next few years.

NEW ZEALAND: FORESTRY PRODUCTION
(1,000 Cubic Meters)

	1986	1987	1988	1989	1990 1/
Harvest	9,145	9,046	10,200	11,500	12,500
Wood chips 2/	1,700	1,694	1,547	1,600	1,740
Softwood logs	4,948	4,957	5,676	6,080	7,130
Softwood lumber	2,079	1,837	1,842	2,092	2,115
Poles, piles, posts, pitprops	205	171	165	190	205
Softwood veneer	83	83	77	83	89
Softwood plywood	64	60	61	62	68
Medium density fiberboard	248	294	392	421	460
Particleboard	178	183	175	171	174

1/ Preliminary.
2/ Wood chips reported in 1,000 metric tons.

CHILE: RASPBERRY PRODUCTION CONTINUES TO INCREASE

Plantings of raspberries increased during 1989/90 but at a slower rate than in previous years. The slowdown reflects large farm-sector debt, lower export prices, and changes in labor and social policies by the newly elected Government. Raspberry production is a highly labor intensive activity. When temporary farm workers were given the right to strike farms and packing houses last year, investment in the industry slowed and additional plantings were postponed.

Chile's raspberry harvest starts in November and extends through late April/early May. If the 1990/91 forecast of 10,760 tons from a planted area of 2,010 is realized, production will have more than tripled and yields nearly doubled in just three years. Area and production data are as follows in hectares and metric tons.

Year	Area Planted	Production
1987/88	1,150	3,200
1988/89	1,570	4,870
1989/90 1/	1,790	8,500
1990/91 2/	2,010	10,760

1/ Preliminary.
2/ Forecast.

MEXICO: WHEAT PRICES MAY INCREASE

Mexican wheat producers may benefit from a substantial rise in wheat prices, according to the U.S. agricultural counselor in Mexico City. Seasonal tariffs were recently added for rice and sorghum; wheat may be next. Wheat producers are successfully arguing that they should be paid more than the international wheat price because of the impact of subsidies. The Mexican Government is altering its price policy rather than following world prices down. Mexican press reports indicate that the new price levels would be 21 percent higher than the negotiated price for the winter wheat crop (planted in the fall of 1989) and 15 percent higher than the negotiated price for the minor spring crop (planted in spring of 1990). A price level near these indicated prices would likely stimulate wheat plantings for 1991/92.

INDIA RAPESEED PRODUCTION OVERVIEW

Rapeseed is the second most important crop in the Indian edible oilseed economy, following peanuts. Other Indian oilseeds include soybean, sunflower, flaxseed, cottonseed, and copra. The 1990/91 crop is forecast to continue the recent upward trend and is estimated at 4.0 million tons from 4.8 million hectares. Both area and yield, therefore, are estimated near the record level. Rapeseed is expected to contribute approximately 26 percent of total oilseed production in 1990/91, from 24 percent of total oilseed area.

As cultivated in India, rapeseed constitutes a group of related oilseed crops including Indian Mustard, Yellow Sarson, Brown Sarson, Toria, and Taramira. These oilseeds have wide adaptability in regards to agroclimatic conditions, with cultivation heavily centered in the northern Indo-Gangetic Plain. Rapeseed is generally grown as a winter crop (rabi season); however, some species of short duration are utilized as catch crops following the major summer grains and sugarcane.

Rapeseed output remained essentially stagnant during the 1960's and 1970's at around 1.5 million tons. It did not receive significant government and research attention until the 1970's and 1980's, as was true for all oilseeds in India. Oilseed production shortfalls in India, and subsequent reliance on expensive foreign vegetable oil imports, spurred the Indian Government to focus attention and money on the oilseed sector. Results from these efforts began to appear in a significant fashion as the 1980's progressed. During that period rapeseed area grew 29 percent, yields 52 percent, and production 66 percent. Improved cultivation techniques, along with increased use of fertilizer, irrigation, and certified seed provided the necessary boost to rapeseed yields in the country. In addition, the Government revised its oilseed procurement price system, notifying farmers earlier about support prices and crop input subsidies.

PRODUCTION ENVIRONMENT

Rapeseed is cultivated across the northern one-third of the country, from the Pakistan border on the west to the borders of Bangladesh and Burma on the east. It is adapted to mostly dry, infertile growing areas, and is the major companion crop to winter wheat. Rapeseed is most commonly grown in a mixed-crop with wheat, under rain-fed or semi-irrigated conditions. It grows, however, under a lower scale of farm management and investment than wheat. Traditionally, farmers have considered rapeseed a higher risk to cultivate owing to its susceptibility to insect damage, frost injury, and drought. It is grown primarily during the winter or "rabi" growing season (September-March). The optimum planting time is early October, with the bulk of harvest occurring in February. Currently, the Indian Government estimates that irrigated rapeseed area is approximately 2.65 million hectares, or 55 percent of total harvested area. Government records indicate that certified seed distribution reached 5,400 metric tons in 1988/89, enabling farmers to cover 23 percent of total area with improved varieties.

Rapeseed cultivation is heavily focused in a small group of northern states, with over 50 percent of total area and production concentrated in just two. The leading producers in descending order are Rajasthan, Uttar Pradesh, Haryana, Madhya Pradesh, Gujarat, West Bengal, and Punjab. Rapeseed also is grown to a lesser extent in Bihar, Assam, Kashmir, and Orissa. As a result of

India's emphasis on oilseed production in the 1970's, rapeseed area and production increased significantly in each of these states during the 1980's, with the notable exception of Uttar Pradesh. Farmers in Uttar Pradesh shifted nearly 1.0 million hectares of rapeseed land into wheat cultivation during this period. Evidence of this is more clearly displayed in the accompanying table (Competitor Crops). The increase in rapeseed area in most producer states during the 1980's was not directly offset by wheat area losses. In some instances, both crops experienced area increases. Total wheat area in India, however, did decline by some 1.6 million hectares during the 1980's, but mostly from growing areas outside the rapeseed belt.

RAPESEED STATE-LEVEL STATISTICS

MAJOR PRODUCERS:	AREA (MHa)	% Total	PRODUCTION (MMT)	% Total	AVG YIELD (MT/Ha)	IRRIGATED AREA (%)
Rajasthan	1.5	31.4	1.4	32.6	0.79	68.4
Uttar Pradesh	1.1	22.2	0.9	21.1	0.70	61.7
Haryana	0.4	7.8	0.5	10.8	0.96	71.7
Madhya Pradesh	0.4	9.0	0.4	8.9	0.70	29.3
Gujarat	0.2	5.0	0.3	7.5	1.20	94.2
West Bengal	0.4	7.8	0.3	7.4	0.74	54.1
Punjab	0.2	3.3	0.2	3.6	1.00	88.7

* State-level estimates provided by U.S. agricultural counselor/India
* Irrigation statistics provided by Indian Government.
* All statistics are for 1988/89 growing season, with average yields estimated for 1984/85-1988/89 period.

COMPETITOR CROPS: AREA CHANGE 1984/85 TO 1988/89

MAJOR RAPESEED PRODUCERS:	RAPESEED (Hectares)	WHEAT (Hectares)
Rajasthan	+ 1,180,000	- 372,000
Uttar Pradesh	- 915,000	+ 1,110,000
Haryana	+ 250,000	+ 280,000
Madhya Pradesh	+ 255,000	+ 515,000
Gujarat	+ 130,000	- 130,000
West Bengal	+ 264,000	- 120,000
Punjab	+ 80,000	+ 277,000
Total	+ 1,244,000	+ 1,560,000
All-India	+ 1,395,000	- 1,600,000

VARIETIES

Of the five oilseed crops in India which are classified "rapeseed," Indian mustard is the most important. The others include yellow sarson, brown sarson, toria, and taramira. Indian mustard accounts for approximately 70 percent of total rapeseed area, and is characterized by wide agroclimatic adaptability, higher resistance to pests, diseases, and drought. Brown and yellow sarson varieties are currently cultivated on a restricted scale, and relegated to drier areas and more marginal land holdings. They are highly susceptible to pest attack, particularly aphids, and have a comparatively low yield. Yellow sarson, however, does produce the highest quality oil of the entire Indian rapeseed family. Toria varieties are cultivated in the eastern sector of the rapeseed belt, and are considered important catch crops following sugarcane. Toria has a short growing season of 70-90 days, enabling it to avoid most major pest, disease, and weather problems such as drought and frost. Finally, taramira is confined to localized areas in northwest India, including Punjab, Haryana, western Uttar Pradesh, and Rajasthan. It has a relatively high oil content and is extremely drought tolerant, providing farmers with a safe planting option in years of short moisture. Although it has a growing period of 150 days, it can be planted as late as November, later than other rapeseed varieties.

As part of the major oilseed mission launched by the Indian Government to improve oilseed productivity and production technology, rapeseed varietal research began in the early 1970's. In the past several years significant results have been achieved. Over 30 improved rapeseed varieties have been released at the state and national level which have the ability to raise national productivity by roughly 20 percent. Of the 30 high yielding varieties, 10 are of Indian mustard, 6 of yellow sarson, 4 of brown sarson, 8 of toria, and 2 of taramira. These newly developed rapeseed varieties were field tested by farmers in 10 states during the 1982/83 and 1983/84 growing seasons. Growers averaged yields of greater than 2.4 metric tons per hectare, while some farmers in Gujarat attained crop yields of 3.3 tons/Ha. The national average yield, by comparison, stood between 0.70 and 0.85 tons/Ha. Ideally, with the adoption of complete crop management recommendation packages, Indian rapeseed yields have the potential to increase significantly over current levels.

In order to address the edible oil deficiency situation in India, the focus of rapeseed research has been on increasing crop yields and oil content in the seed. This has occurred even at the expense of improving the oil quality. Rapeseed oil is the primary cooking oil in northern India, where the bulk of the nation's population resides. It is not readily replaced by any other edible oil. Cultivation of improved "double low" rapeseed varieties has not been pursued owing to the taste preference of the traditional consumer, who prefers the pungent cooking flavor of domestic varieties. Indian rapeseed oil is generally high in erucic acid content, averaging between 38-57 percent. Most western producers consider oil with erucic acid over 50 percent to be of industrial quality, and not for human consumption. However, Indians have traditionally consumed such oil and consider rapeseed oil as too costly for industrial purposes. The rapeseed meal by-product of the edible oil production process does contain toxic glucosinolates and is not used for human consumption. It is, however, utilized at present as a livestock feed and crop manure.

CURRENT CROP SITUATION

An overall perspective of Indian rapeseed cultivation reveals that the low average yield currently achieved by growers is due to a host of endemic problems affecting the oilseed sector. Rapeseed is particularly affected by management problems, including excessive losses to plant diseases and insects. Fertilizer application to the crop is low, while irrigation resources barely cover half the cultivated area. These difficulties are aggravated by grower attitudes concerning crop risk which confine rapeseed to marginal land areas. Finally, quality certified seed covers less than a quarter of total rapeseed area.

Considering these factors, the 1990/91 crop season has begun on a favorable note. Rainfall from the summer monsoon was plentiful in virtually all rapeseed growing areas prior to planting. The monsoon's timely retreat from northern India in September also enabled normal planting operations to occur. In addition, domestic market prices for oilseeds have been at record levels for most of the year and are well above the government's support price. The strong domestic market for oilseeds is expected to provide heightened incentives to farmers this year and should encourage additional plantings. Forecasts for 1990/91 rapeseed plantings are near record levels at 4.8 million hectares, up from 4.7 million in 1989/90. At present, the 1990/91 crop is well established and is awaiting the arrival of winter rains. Although the crop has low water requirements, timely showers are required to support optimum yield.

RAPESEED AREA, YIELD, AND PRODUCTION

Year:	Area (1,000 Ha)	Yield (MT/Ha)	Production (1,000 Tons)
1979/80	3,471	0.41	1,428
1980/81	4,113	0.49	2,002
1981/82	4,399	0.54	2,382
1982/83	3,827	0.58	2,207
1983/84	3,874	0.67	2,608
1984/85	3,987	0.77	3,073
1985/86	3,979	0.67	2,681
1986/87	3,719	0.70	2,605
1987/88	4,619	0.75	3,455
1988/89	4,865	0.86	4,200
1989/90	4,700	0.81	3,800
1990/91	4,800	0.83	4,000

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MAP 2


INDIA: Rapeseed Growing Regions
Jammu and Kashmir
Himachal Pradesh
Punjab
Haryana
Delhi
Rajasthan
Uttar Pradesh
Sikkim
Arunachi Pradesh
Assam
Nagaland
Meghalaya
Manipur
Tripura
Mizoram
Bihar
West Bengal
Orissa
Madhya Pradesh
Gujarat
Goa
Maharastra
Andhra Pradesh
Karnataka
Tamil Nadu
Kerala
ARABIAN SEA
BAY OF BENGAL
Intensive Production
Less Intensive

WORLD COFFEE PRODUCTION

World 1990/91 green coffee production is estimated at 100.9 million 60-kilogram bags, up 5 percent from the 96.4 million-bag harvest last year but down 1 percent from the first forecast made in June (see Circular Series WAP 6-90). Regions showing increases over last year include South America, up 11 percent, and Asia up 9 percent. Decreases were noted in other regions, with Africa showing the largest decline of 1.2 million bags from a year ago. The 1990/91 estimate is 2 percent less than the record 1987/88 harvest of 103.2 million bags.

The South American coffee production estimate of 49.5 million bags is down 4 percent from the June forecast of 51.5 million. This region accounts for 49 percent of the 1990/91 world estimate. Brazil, the world's largest producer, harvested a crop estimated at 31.0 million bags in 1990/91, down 2 million bags from the June forecast, but 19 percent more than last year's 26.0 million bag output. A survey indicated coffee dehusking yields were slightly below normal. Dehusking yields in northern and western Sao Paulo coffee producing areas were reported to be as low as 17 kilograms of green coffee beans obtained by dehusking 40 kilograms of dried coffee cherries. In southwest Minas Gerais yields were reported mostly at 18 to 19 kilograms with the exception of a few areas where yields were as low as 17 kilograms. In Parana, Espirito Santo, and southeast Minas Gerais, dehusking yields were reported close to normal at 19 to 20 kilograms. Brazil has a potential for a crop in excess of 40 million bags; however 1990/91 was the off-year in the biennial coffee cycle and weather was not favorable for optimal development of the crop. Brazil's coffee planted area is estimated to have increased by about 20,000 hectares (160 million trees) during the past year. The number of new trees coming into first significant production is estimated at 140 million. The 1990/91 crop was harvested from a total coffee tree population estimated at 4.2 billion, up 4 percent from last year.

In Colombia, coffee production in 1990/91 is estimated at 13.6 million bags, unchanged from the earlier forecast but 2 percent above last year's revised estimate. The rise from a year earlier is attributed to a 2 percent increase in area harvested. The expansion of coffee area has occurred steadily throughout the decade of the 1980's. During the period 1980/81 through 1988/89, new plantings totaled 77,200 hectares, or 7 percent of current planted area. Two problems are causing coffee authorities and growers concern in Colombia. Coffee rust has been a problem to coffee growers since 1983; increased problems with coffee rust began in June 1989 when the Coffee Growers Federation (CGF) eliminated its direct subsidy for coffee rust control. Broca, the other problem, is the common name for a tiny burrowing fruit worm (Hypothenemos hampei sp. ferrari) that destroys the coffee cherry. Broca first appeared in Colombia in 1988 near the border with Ecuador. It then spread to other coffee areas in the departments of Huila, Cauca, and Valle del Cauca. In November 1990, broca was discovered in Risaralda, the heart of Colombia's most important coffee producing region. The CGF and the Colombian Agricultural Institute are conducting educational campaigns to instruct growers how to avoid broca and what to do if it spreads to their farms. The broca problems will

likely cause production costs to increase, but production itself will not be seriously affected except in marginal areas where farmers lack the access to information and the funds to control it. It is believed that rural harvest workers, moving from area to area, are spreading the disease. Colombia has a coffee tree population of 2.5 billion, up 4 percent from last year.

In Indonesia, 1990/91 coffee production is estimated at 7.0 million bags, up 500,000 bags from the June forecast and 100,000 more than last year. The increased output is due to good weather, increased outturn from new plantings and stronger than expected domestic prices. A deregulation measure released at the end of May eliminated the cap on the number of exporters, and about 475 new export companies have reportedly begun operations. The increased number of exporters are scrambling to purchase the crop, creating a surprisingly strong market. Some of the activities of the coffee exporters are driven by the expectation that the ICA will be reinstated at a future date and domestic quota allocations will be based on performance during the lapse of the quota system. Indonesia is estimated to have a coffee tree population of 1.34 billion, increasing at a slow annual rate of only 10,000 trees during the past three years.

Mexico's coffee production in 1990/91 is estimated at 4.55 million bags, 200,000 bags less than the earlier forecast and down 9 percent (450,000 bags) from 1989/90. The lower output reflects the damage caused by freezing temperatures in late December 1989 and some damage caused by hurricane Dianne near Veracruz in August 1990. Good rainfall occurred in the summer of 1990 in Mexico's leading coffee producing states except for some storm damage as reported above in Veracruz. However, the relatively good weather will not offset losses caused by the December 1989 freeze which killed a large number of bearing and non-bearing trees in the states of Puebla, San Luis Potosi, and Hidalgo. It is expected that these states will have little coffee production for the next three seasons. Most of Puebla's coffee growers replanted damaged trees with high-yielding varieties. In addition, growers have grafted and pruned damaged trees to accelerate recovery. The Government through its National Solidarity Program (PRONASOL), provides subsidized production credits which facilitates replacement of older coffee trees. Also through PRONASOL, growers affected by the December frost receive interest free production loans to prune and/or plant new coffee trees. Several coffee growers are reportedly shifting some of their production area into other crops such as corn and dry beans which still have price supports. Mexico's coffee parastatal organization (INMECAFE), has launched a special program to expand parchment coffee production by providing equipment and machinery to cherry coffee growers. Mexico has a total coffee tree population of 870 million, up 7 percent or 60 million from 1989/90.

In Cote d'Ivoire, 1990/91 coffee production is estimated at 4.17 million bags, up 14 percent (500,000 bags) from the June forecast, but down 12 percent from the revised 1989/90 estimate of 4.73 million. The decline from a year ago is due to drought. The 1990/91 marketing year officially opened on October 4, with the Government maintaining the producer price for well-dried cherries at 100 F cfa/kg. (The current exchange rate is 1 US dollar equals about 250 F cfa.) Most farmers have completed their first harvesting and some are on their second harvest. The total coffee tree population in Cote d'Ivoire is about 1.8 billion trees, about the same as last year.

Guatemala's 1990/91 coffee production is estimated at 3.35 million bags, virtually unchanged from the June estimate, but 4 percent less than last year. At current price levels, many coffee growers in Guatemala are expected to use less fertilizer and other chemical inputs. Guatemala's coffee tree population is estimated at nearly 700 million trees, unchanged from a year ago.

Uganda's 1990/91 coffee production is estimated at 3.0 million bags, unchanged from the June estimate, but down 100,000 bags from last year's outturn. The Ugandan Government has begun to modify its coffee policy as the World Bank and major organizations are encouraging reforms that will both strengthen the Coffee Marketing Board (CMB) and allow more coffee marketing competition. The goal of the policy is to maximize export revenues by shoring up production and export volumes while defending the unit value of coffee exports. However, coffee crop quality continues to decline due in large measure to the increasing average age of the country's trees. A study by the CMB in Western Uganda showed that half of the trees were planted more than 20 years ago, forty percent between 10 and 20 years ago, and only 10 percent less than 10 years ago. The trees in Western Uganda are younger than those in other districts.

India's 1990/91 coffee production is estimated at 2.8 million bags, 700,000 bags less than previously forecast, but 800,000 bags more than produced in 1989/90. The decline from the June number was mainly due to dry weather from October 1989 to March 1990, followed by an erratic 1990 monsoon in the coffee growing regions of South India. A new pest, the berry borer, has been observed in coffee plantations on the Karnataka-Tamil border. This is its first appearance in India, but it has caused great losses in various central African countries and in Sri Lanka. In order to avoid further spread of berry borer, the Coffee Board is taking control measures, using endosulfan. Coffee Board officials have contacted the Commonwealth Institute of Biological Containment in London to help develop other techniques to contain this pest.

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TABLE 9

GREEN COFFEE: TOTAL PRODUCTION IN SELECTED COUNTRIES
1987/88-1989/90, Estimates; 1990/91 Forecast 1/
(IN THOUSANDS OF 60-KG BAGS) 2/

Region and Country	1987/88	1988/89	1989/90	1990/91 June	1990/91 Dec
NORTH AMERICA					
Costa Rica	2,375	2,758	2,453	2,600	2,680
Cuba	436	450	475	400	480
Dominican Republic	837	726	756	760	760
El Salvador	2,538	1,492	2,737	2,400	2,600
Guatemala	3,020	3,022	3,474	3,350	3,345
Haiti	540	550	550	550	550
Honduras	1,553	1,635	1,965	2,050	2,040
Jamaica & Dep	41	14	19	25	26
Mexico	4,717	5,500	5,000	4,750	4,550
Nicaragua	630	692	720	600	625
Panama	220	200	220	220	260
Trinidad and Tobago	15	15	15	15	15
United States 3/	230	254	279	275	285
TOTAL	17,152	17,308	18,663	17,995	18,216
SOUTH AMERICA					
Bolivia	155	165	180	170	170
Brazil	38,000	25,000	26,000	33,000	31,000
Colombia	13,000	10,700	13,300	13,600	13,600
Ecuador	1,663	2,150	2,050	2,090	2,160
Guyana	4	5	5	5	5
Paraguay	300	410	430	400	400
Peru	1,020	1,400	1,400	1,150	1,150
Venezuela	1,331	1,127	1,112	1,050	1,050
TOTAL	55,473	40,957	44,477	51,465	49,535
AFRICA					
Angola	270	200	170	200	170
Benin	30	40	35	35	35
Burundi	625	600	515	550	550
Cameroon	1,251	1,760	1,508	1,200	1,200
Central African Rep.	215	355	300	250	350
Congo	15	25	25	25	25
Cote d'Ivoire	3,103	3,989	4,734	3,670	4,170
Equatorial Guinea	18	15	15	15	15
Ethiopia	3,100	2,900	3,000	3,000	3,000
Gabon	30	35	30	30	30
Ghana	14	17	35	15	40
Guinea	95	100	125	125	125
Kenya	2,127	1,735	1,500	1,600	1,120
Liberia	60	82	40	50	30
Madagascar	1,125	1,100	1,100	1,000	1,050
Malawi	83	72	95	90	90
Nigeria	95	90	95	90	90
Rwanda	705	671	493	600	660
Sierra Leone	110	92	100	100	100
Tanzania	770	867	830	870	870
Togo	290	300	300	300	300
Uganda	2,600	3,000	3,100	3,000	3,000
Zaire	2,000	1,750	1,700	1,640	1,625
Zambia	11	10	15	15	15
Zimbabwe	250	175	225	225	225
TOTAL	18,992	19,980	20,085	18,695	18,885

FOOTNOTES AT END OF TABLE CONTINUED

TABLE 9 (Continued)

GREEN COFFEE: TOTAL PRODUCTION IN SELECTED COUNTRIES
1987/88-1989/90, ESTIMATES; 1990/91 FORECAST 1/
(IN THOUSANDS OF 60-KG BAGS) 2/

Region and Country	1987/88	1988/89	1989/90	1990/91 June	1990/91 Dec
ASIA					
India	2,050	3,590	2,000	3,500	2,800
Indonesia	5,965	6,750	6,900	6,500	7,000
Malaysia	78	75	75	75	75
Philippines	1,045	1,350	1,150	1,150	1,200
Sri Lanka	70	75	70	75	75
Thailand	592	1,025	800	900	900
Vietnam	579	922	1,025	175	1,100
Yemen	60	65	65	65	65
TOTAL	10,439	13,852	12,085	12,440	13,215
OCEANIA					
New Caledonia	6	6	5	5	5
Papua New Guinea	1,100	1,175	1,118	1,090	1,030
TOTAL	1,106	1,181	1,123	1,095	1,035
WORLD TOTAL	103,162	93,278	96,433	101,690	100,886

1/ Coffee marketing year begins about October in some countries and April or July in others.
2/ One bag = 132.276 pounds.
3/ Includes Puerto Rico and Hawaii.

NOTE: Production estimates for some countries include cross-border movements.

December 1990 Production Estimates and Crop Assessment Division

WORLD UNMANUFACTURED TOBACCO PRODUCTION

World 1990 unmanufactured tobacco production is currently forecast at 7.1 million tons, 2 percent above USDA's June estimate, but still slightly below 1989. The increase from June is due to higher production in United States, Malawi, India, Turkey, and Italy that more than offset lower output in Mexico, Argentina, Greece, and South Korea. The decrease from 1989 is due to forecast reductions in Chinese, Brazilian, and Turkish production which more than offset higher production in Bulgaria, Malawi, Thailand, and the United States.

Total unmanufactured tobacco production in North America for 1990 is forecast at 821 thousand tons, up 2 percent from June and up 9 percent from 1989. U.S. production is up 4 percent from June because of higher plantings and slightly better yields than expected. The 16-percent increase from 1989 is due to higher production quotas for both burley and flue-cured types. Production in Mexico is down sharply, 23 percent from June and 43 percent from last year because producers could not reach agreement with the Government buying agency on prices for the 1990 crop. The same problem may affect 1991 production. Canada is expected to produce a 5 percent larger crop than the June production estimates for 1990 because of better yields and slightly higher plantings; however the reduction in the flue-cured quota will keep Canadian production 14 percent below 1989. For 1991, another reduction in Canadian plantings is expected.

Forecast 1990 tobacco production in Brazil remains at the June estimate of 435 thousand tons. Planted area for 1991 is expected to be unchanged as producers have not finished price negotiations with buyers and most of the 1991 crop has already been transplanted. Total unmanufactured tobacco production in Argentina for 1990 is estimated at 68 thousand tons, down 4 percent from the June due to a reduction in plantings and a slight drop in yields. For 1991, 20-30 percent higher farm prices are expected to result in production recovering to approximately the 1989 level.

In Italy, 1990 tobacco production is forecast at a record 205 thousand tons, a 9-percent increase over the June forecast, as estimated area for harvest was raised 8 percent. Output for 1990 is estimated at 4 percent over 1989. In Greece, production is projected down 3 percent from June, but up 5 percent from 1989. The change since June is due to a reduction in total plantings but higher estimated yields. A reduction in oriental tobacco plantings and a near-doubling of flue-cured tobacco compared to June resulted in an increase in the expected yield. Overall, this change is seen as a positive move to more marketable types. In Spain, tobacco production in 1990 is forecast almost 10 percent below 1989 because of reduced plantings. Production for 1991 is expected to be up slightly despite EC penalties for not reducing production. Favorable farm prices in Spain give some incentive to expand production.

South Africa's 1990 tobacco crop is estimated at 34 thousand tons, up 8 percent from the June estimate because of better yields, but down 13 percent from 1989. For 1991, production is expected to increase slightly. Zimbabwe's production for 1990 is projected to reach 139 thousand tons because of increased plantings and slightly higher yields. For 1991, output is expected to be up sharply because of this year's record producer prices for flue-cured tobacco, the major type. In Malawi, 1990 production is estimated at 102 thousand tons, 14 percent above the June forecast and up 17 percent from 1989. The increase is due to both higher yields and increased plantings. High market prices this year are expected to encourage increased production next year.

In India, tobacco production for 1990 is estimated at 490 thousand tons, up 13 percent from June, but down slightly from 1989. The drop in yields forecast earlier due to weather problems was not as serious as was expected in June. For 1991, production is projected up again due to better yields. Though largely unchanged in 1990, Japanese tobacco production for 1991 is expected to fall slightly as plantings continue to be reduced. Japan continues to encourage flue-cured and burley production to keep domestic tobacco content at 50 percent in locally produced cigarettes. For 1991 flue-cured production is projected up slightly as plantings increase. South Korean tobacco production for 1990 is estimated at 71 thousand tons, down 4 percent from June and down 11 percent from last year despite upward revisions in area planted. Wet spring weather reduced quality. For 1991, production is expected to be up slightly. Thailand's 1990 tobacco crop is estimated at 75 thousand tons, up 1,500 tons from the June forecast and 16 percent above 1989. The change from June is due to both increased plantings and improved yields of flue-cured and burley tobaccos which account for over two thirds of production. Favorable farm prices for burley and flue-cured tobacco are expected to result in expanded production next year.

Turkey is expected to produce 252 thousand tons of tobacco in 1990, up 19 percent from June estimates but down 6 percent from the revised 1989 levels. Farmers cut area planted by only 4 percent, not the 20 percent projected in June. In 1991, area planted is expected to be down sharply again. Farmers have asked for a support increase but stocks are high and a price increase is unlikely.

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TABLE 10

TOTAL UNMANUFACTURED TOBACCO
AREA AND PRODUCTION, WORLD AND SELECTED REGIONS

REGION AND COUNTRY	---AREA--- 1988	1989	1990 (FORECAST)	---PRODUCTION--- 1988	1989	1990 (FORECAST)
	----------HECTARES----------			----------METRIC TONS----------		
NORTH AMERICA						
Canada	29,136	31,140	28,360	69,787	75,573	65,025
Mexico	44,895	33,029	21,905	75,120	59,890	34,193
United States	256,692	274,548	294,383	621,202	620,221	721,392
REGION TOTAL	330,723	338,717	344,648	766,109	755,684	820,610
SOUTH AMERICA						
Argentina	55,233	55,248	49,160	72,235	80,544	67,539
Bolivia	1,250	1,250	1,250	1,250	1,250	1,250
Brazil	267,000	294,000	282,000	419,000	462,000	435,000
Chile	3,024	3,423	3,901	9,969	11,105	13,050
Colombia	20,771	19,900	20,274	31,839	30,236	31,369
Ecuador	1,940	1,800	1,800	4,160	3,850	3,850
Paraguay	5,225	2,740	3,040	7,070	3,545	4,045
Peru	2,500	2,500	2,500	3,100	3,100	3,100
Uruguay	800	800	800	1,400	1,400	1,400
Venezuela	8,799	7,917	8,556	14,528	13,490	14,547
REGION TOTAL	366,542	389,578	373,281	564,551	610,520	575,150
CENTRAL AMERICA						
Costa Rica	800	851	878	1,643	1,567	1,733
El Salvador	620	544	562	1,409	970	1,056
Guatemala	5,184	6,440	6,687	8,951	11,866	11,654
Honduras	2,340	2,531	2,553	3,775	4,246	4,808
Nicaragua	2,240	2,240	2,240	4,550	4,550	4,550
Panama	720	720	720	1,302	1,302	1,302
REGION TOTAL	11,904	13,326	13,640	21,630	24,501	25,103
CARIBBEAN						
Cuba	50,000	50,000	50,000	44,000	44,000	44,000
Dominican Rep.	22,828	27,011	13,649	22,757	28,053	18,703
Jamaica & Dep	1,175	1,175	1,175	2,339	2,339	2,339
REGION TOTAL	74,003	78,186	64,824	69,096	74,392	65,042
NORTH AFRICA						
Algeria	2,580	2,600	2,700	4,200	4,800	5,000
Libya	900	900	900	1,450	1,450	1,450
Morocco	4,768	5,483	5,835	6,440	6,551	7,288
Tunisia	5,400	5,455	5,500	5,500	5,610	5,650
REGION TOTAL	13,648	14,438	14,935	17,590	18,411	19,388
OTHER AFRICA						
Angola	3,950	3,950	3,950	3,900	3,900	3,900
Burundi	2,000	2,000	2,000	1,600	1,600	1,600
Cameroon	3,400	3,400	3,400	5,100	5,500	5,500
Congo	4,000	4,000	4,000	1,800	1,800	1,800
Cote D' Ivoire	10,000	10,000	10,000	2,467	2,490	2,490
Ethiopia	3,000	3,000	3,000	3,400	3,450	3,500
Ghana	3,950	3,950	3,950	1,825	1,850	1,850
Kenya	8,330	10,335	8,805	9,192	11,510	9,910
Madagascar	5,900	5,900	5,900	5,500	5,500	5,500
Malawi	89,750	89,640	100,200	75,053	86,615	101,513
Mozambique	2,700	2,700	2,700	2,900	2,900	2,900
Nigeria	6,500	7,700	7,700	7,921	9,223	9,223
South Africa	24,936	24,539	24,841	31,593	38,949	33,947
Tanzania	21,250	21,250	21,250	17,055	15,000	14,000
Togo	4,000	4,000	4,000	2,000	2,000	2,000
Uganda	3,300	3,500	4,300	3,000	3,200	4,000
Zaire	3,700	3,700	3,700	4,110	4,110	4,110
Zambia	3,500	3,500	3,500	4,300	4,300	4,300
Zimbabwe	61,563	60,544	62,262	123,671	133,800	138,937
REGION TOTAL	265,729	267,608	279,458	306,387	337,697	350,980

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Table 10 (Continued)

TOTAL UNMANUFACTURED TOBACCO
AREA AND PRODUCTION, WORLD AND SELECTED REGIONS

REGION AND COUNTRY	AREA 1988	AREA 1989	AREA 1990 (FORECAST)	PRODUCTION 1988	PRODUCTION 1989	PRODUCTION 1990 (FORECAST)
	HECTARES			METRIC TONS		
OTHER ASIA						
Bangladesh	54,000	54,000	54,000	51,545	51,545	51,545
Burma	55,000	55,000	55,000	45,000	45,000	45,000
Cambodia	9,000	9,000	9,000	5,000	5,000	5,000
China	1,554,850	1,726,500	1,617,250	2,731,500	2,777,150	2,692,300
India	318,000	375,300	397,000	367,400	491,400	490,000
Indonesia	241,377	233,529	244,540	137,775	150,114	158,050
Japan	40,557	30,661	30,661	85,790	74,397	74,410
Korea, North	37,000	37,000	37,000	46,000	46,000	46,000
Korea, South	31,821	30,985	31,339	72,998	78,422	70,073
Laos	4,000	4,000	4,000	3,000	3,000	3,000
Malaysia	9,632	12,481	10,300	7,480	13,877	10,950
Pakistan	41,599	43,216	42,124	69,530	73,950	70,420
Philippines	49,457	50,150	49,950	68,802	73,305	71,150
Sri Lanka	12,165	12,165	12,165	9,000	9,000	9,000
Taiwan	8,654	8,019	7,940	20,712	18,986	19,183
Thailand	55,502	56,716	62,275	58,561	64,780	75,060
Vietnam	32,000	32,000	32,000	28,000	28,000	28,000
REGION TOTAL	2,554,614	2,770,722	2,696,544	3,808,093	4,003,926	3,919,141
MIDDLE EAST						
Iran	18,000	18,000	18,000	24,500	25,000	25,000
Iraq	2,000	2,000	2,000	2,180	2,180	2,180
Jordan	6,000	6,000	6,000	4,000	4,150	4,150
Lebanon	3,750	3,750	3,750	5,000	5,000	5,000
Oman	1,800	1,800	1,800	2,100	2,000	2,000
Syria	14,355	10,145	15,500	16,054	10,859	17,010
Turkey	236,860	273,032	260,850	218,774	268,101	252,144
United Arab Em.	350	350	350	2,000	2,000	2,000
Yemen (Sanaa)	3,322	3,300	3,300	5,600	5,720	5,720
REGION TOTAL	286,437	318,377	311,550	280,208	325,010	315,204
EUROPEAN COMMUNITY						
Belgium-Lux.	426	438	435	1,647	1,805	1,800
France	12,670	11,413	10,930	29,357	29,216	26,230
Germany, West	3,084	3,299	3,260	7,090	7,049	7,350
Greece	87,006	81,421	76,459	134,795	125,703	131,827
Italy	93,810	95,165	98,200	184,355	197,316	205,000
Portugal	2,123	2,076	2,353	4,151	5,472	5,890
Spain	24,400	27,330	23,187	34,325	45,415	41,090
REGION TOTAL	223,519	221,142	214,824	395,720	411,976	419,187
Switzerland	685	675	670	1,750	1,620	1,500
EAST EUROPE						
Albania	24,000	24,000	24,000	15,000	15,000	15,000
Bulgaria	87,609	79,000	83,500	115,734	83,200	106,000
Czechoslovakia	3,750	3,750	3,750	5,500	5,500	5,500
Germany, East	3,648	3,656	2,620	5,382	5,415	3,797
Hungary	10,900	10,200	8,490	22,800	19,305	19,885
Poland	41,772	29,429	30,150	92,870	60,000	62,050
Romania	39,500	39,000	40,000	38,650	37,425	38,800
Yugoslavia	51,000	49,000	45,000	56,610	63,270	46,620
REGION TOTAL	262,179	238,035	237,510	352,546	289,115	297,652
USSR	131,500	113,400	103,400	242,000	233,200	225,000
OCEANIA						
Australia	5,015	4,771	4,800	13,335	13,296	13,500
New Zealand	700	600	600	1,800	1,550	1,550
REGION TOTAL	5,715	5,371	5,400	15,135	14,846	15,050
OTHER 2/	7,888	7,502	7,282	6,814	6,781	6,624
WORLD	4,535,086	4,777,077	4,667,966	6,847,629	7,107,679	7,055,631

1/ Estimates as of June 1990. 2/ Includes Guyana, Haiti, St. Vincent, Chad, Trin & Tobag, Cent. Afr. Rep., Liberia, Mali, Mauritius, Niger, Benin, Reunion, Sierra Leone, Swaziland, Cyprus, Israel, Austria, and Solomon Is

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CITRUS PRODUCTION SITUATION FOR 1989/90 AND 1990/91

Commercial citrus production in selected major producing countries for 1989/90 is estimated at 48.5 million tons,. 2 percent above USDA's June estimate, but 7 percent below the revised 1988/89 production of 52.2 million tons. The increase since June is due largely to upward revisions in Italian and Israeli production. Northern Hemisphere 1990/91 production is forecast at 34.4 million tons, up 8 percent from last year's harvest. Forecasts for 1990/91 production are sharply higher in the United States, which together with smaller gains in Spain, Mexico, Turkey, and Morocco more than offset substantial reductions in Japan and Italy.

Commercial orange production in the selected countries for 1989/90 is currently estimated at 33.9 million tons compared to 33.1 million forecast in June and an estimated 36.4 million in 1988/89. Tangerine production for 1989/90 is estimated at 6.2 million tons compared to the June forecast of 6.1 million and an estimated 6.6 million in 1988/89. Grapefruit production for 1989/90 is estimated at 3.3 million tons compared to the June forecast of 3.2 million and 4.0 million in 1988/89. Lemon output for 1989/90 is estimated at 3.3 million tons, up one percent from the June forecast, but down 3 percent from 1988/89.

Preliminary forecasts for 1990/91 indicate the Northern Hemisphere countries will increase orange production 10 percent to 21.6 million tons and tangerine production by 4 percent to 5.6 million tons. The Northern Hemisphere grapefruit crop is expected to be up 14 percent, but production of lemons and other citrus is forecast to be virtually unchanged from the 1989/90 harvest.

In the United States, citrus production for 1990/91 is projected up nearly 25 percent to 12.3 million tons due largely to recovery in Florida. Orange production for 1990/91 is estimated at 9.1 million tons, up 27 percent over last year and the largest crop since 1980/81 when production was more than 9.5 million tons. Grapefruit is projected up 24 percent to 2.2 million tons, but trees in Texas are not likely to produce a commercial crop this year because of last year's freeze damage. Mexican citrus production for 1990/91 is projected up about 8 percent because of good weather and an increased number of bearing trees.

In Europe, Spanish citrus production in 1990/91 is forecast at 4.6 million tons up 11 percent from last year and a new record because of good weather and improved farming methods. Orange production for 1990/91 is forecast at 2.5 million tons, up 5 percent from the revised 1989/90 crop. Tangerine production is forecast at 1.5 million tons, up 37 percent from the 1989/90 crop. Lemon production for 1990/91 is forecast at 625,000 tons, down 10 percent from last year because of excessive rain during blossoming.

Greek citrus production for 1990/91 is forecast to drop over 10 percent to 1.1 million tons because of dry weather over the last 10 months which caused irrigation water supplies to be reduced. This is expected to cause smaller fruit size. EC funded orchard restructuring is about 50 percent complete with 1991 the last year of EC payments. The EC program is expected to improve prospects for the Greek citrus industry. Italian citrus production for 1990/91 is forecast down 11 percent to 2.9 million tons due to drought. All types are down except for grapefruit, which is estimated to have increased area harvested.

Japanese citrus production for 1990/91 is forecast to fall 14 percent to 2.3 million tons due to both the continued government program to reduce tangerine output and the fact that this is an off year for tangerines. The second largest crop, The Natsu-mikan or "summer orange", is down from 201,000 tons to 170,000 tons in part due to a reduction in the area harvested.

Israeli citrus production for 1990/91 is forecast at 1.4 million tons, slightly below last year. Gaza citrus production for 1990/91 is forecast to fall 20 percent to 148,000 tons due largely to a shortage of salt-free water for irrigation. Egyptian citrus is forecast at 1.8 million tons, up slightly from last year.

For Morocco, 1990/91 production is forecast up 21 percent to 1.3 million tons due in part to very good weather this year. The increase in production will be in the tangerines and early Navels which were harvested early last year allowing for pruning and better tree care. Turkey's 1990/91 citrus crop is forecast up 22 percent to 1.4 million tons because of improved weather and an increase in the number of bearing trees. In Cyprus, the 1990/91 citrus crop is expected to fall 11 percent to 371,000 tons because of both the biennial off year in the citrus tree yield cycle and a third year of drought.

The Southern Hemisphere's 1989/90 citrus crop has been revised upward slightly to 16.8 million tons. Upward revisions in South African orange production exceeded reductions in Argentina's lemon crop. The 1989/90 orange crop estimate in Brazil remains at the June forecast of 12.2 million tons. Early indications are that Brazil's 1990/91 crop will be larger due to an increased number of trees going into production and the smaller 1989/90 crop that enabled trees to be reinvigorated.

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TABLE 11

COMMERCIAL CITRUS PRODUCTION
(1,000 METRIC TONS)

	1986/87	1987/88	1988/89	1989/90	1990/91 1/
NORTHERN HEMISPHERE					
ALGERIA					
Oranges	167	183	208	230	230
Tangerines	78	84	93	105	105
Grapefruit	2	2	3	4	4
Lemons	6	8	8	9	9
TOTAL	253	277	312	348	348
CUBA					
Oranges	496	508	520	520	520
Tangerines	25	25	26	30	30
Grapefruit	250	285	385	400	400
Citrus, other	64	80	62	70	70
TOTAL	835	898	993	1,020	1,020
CYPRUS					
Oranges	204	138	170	223	192
Tangerines	5	6	11	12	14
Grapefruit	111	96	115	118	106
Lemons	54	46	63	66	59
TOTAL	374	286	359	419	371
EGYPT					
Oranges	1,235	1,387	1,199	1,397	1,400
Tangerines	117	134	151	170	180
Grapefruit	2	2	2	2	2
Lemons	1	2	2	2	2
Citrus, other	150	138	190	240	240
TOTAL	1,505	1,663	1,544	1,811	1,824
GAZA STRIP					
Oranges	151	83	98	160	124
Grapefruit	14	10	14	12	12
Lemons	15	12	13	13	12
TOTAL	180	105	125	185	148
GREECE					
Oranges	881	462	770	933	819
Tangerines	68	49	69	76	74
Grapefruit	6	5	6	7	7
Lemons	168	89	170	189	178
Citrus, other	4	3	4	4	4
TOTAL	1,127	608	1,019	1,209	1,082
ISRAEL					
Oranges	815	627	546	877	790
Tangerines	158	122	90	127	134
Grapefruit	392	314	353	394	418
Lemons	69	47	37	46	44
Citrus, other	13	14	16	25	22
TOTAL	1,447	1,124	1,042	1,469	1,408
ITALY					
Oranges	2,424	1,343	2,170	2,071	1,850
Tangerines	531	333	411	479	400
Grapefruit	8	3	7	8	8
Lemons	813	592	708	665	610
Citrus, other	41	42	18	37	30
TOTAL	3,817	2,313	3,314	3,260	2,898
JAPAN					
Oranges	62	67	58	54	48
Tangerines	2,542	2,941	2,387	2,375	2,045
Lemons	1	2	2	2	2
Citrus, other	279	288	227	201	170
TOTAL	2,884	3,298	2,674	2,632	2,265

FOOTNOTES AT END OF TABLE CONTINUED

TABLE 11 (Continued)

COMMERCIAL CITRUS PRODUCTION
(1,000 METRIC TONS)

	1986/87	1987/88	1988/89	1989/90	1990/91 1/
MEXICO					
Oranges	1,683	1,942	2,268	2,200	2,400
Tangerines	131	151	157	169	198
Grapefruit	91	105	75	100	118
Lemons	9	9	9	9	5
Citrus, other	600	672	680	700	708
TOTAL	2,514	2,879	3,189	3,178	3,429
MOROCCO					
Oranges	650	891	994	775	890
Tangerines	290	303	420	223	325
Grapefruit	4	4	4	4	4
Lemons	20	20	21	20	20
Citrus, other	7	16	12	28	31
TOTAL	971	1,234	1,451	1,050	1,270
SPAIN					
Oranges	2,059	2,442	2,216	2,365	2,476
Tangerines	1,164	1,307	1,260	1,084	1,486
Grapefruit	18	18	22	22	21
Lemons	613	760	733	693	625
Citrus, other	16	16	15	13	14
TOTAL	3,870	4,543	4,246	4,177	4,622
TURKEY					
Oranges	750	700	740	650	750
Tangerines	300	280	310	250	300
Grapefruit	30	27	30	40	40
Lemons	250	220	300	200	300
Citrus, other	6	5	5	4	4
TOTAL	1,336	1,232	1,385	1,144	1,394
UNITED STATES					
Oranges	7,122	7,903	8,272	7,141	9,067
Tangerines	370	369	372	269	308
Grapefruit	2,346	2,541	2,580	1,772	2,155
Lemons	986	712	689	640	693
Citrus, other	57	52	50	45	60
TOTAL	10,881	11,577	11,963	9,867	12,283
TOTAL NORTHERN HEMISPHERE					
Oranges	18,699	18,676	20,229	19,596	21,556
Tangerines	5,779	6,104	5,757	5,369	5,599
Grapefruit	3,274	3,412	3,596	2,883	3,295
Lemons	3,005	2,519	2,755	2,554	2,559
Citrus, other	1,237	1,326	1,279	1,367	1,353
TOTAL	31,994	32,037	33,616	31,769	34,362
SOUTHERN HEMISPHERE					
ARGENTINA					
Oranges	621	650	620	750	N/A
Tangerines	252	283	290	250	N/A
Grapefruit	190	176	155	190	N/A
Lemons	460	517	350	450	N/A
TOTAL	1,523	1,626	1,415	1,640	N/A
AUSTRALIA 2/					
Oranges	475	394	524	486	N/A
Tangerines	33	39	44	42	N/A
Grapefruit	32	30	31	30	N/A
Lemons	36	35	36	35	N/A
TOTAL	576	498	635	593	N/A

FOOTNOTES AT END OF TABLE

CONTINUED

TABLE 11 (Continued)

COMMERCIAL CITRUS PRODUCTION
(1,000 METRIC TONS)

	1986/87	1987/88	1988/89	1989/90 1/	1990/91
BRAZIL					
Oranges	10,650	10,400	14,150	12,150	N/A
Tangerines	479	453	467	482	N/A
Grapefruit	29	24	25	25	N/A
Lemons	35	50	50	50	N/A
Citrus, other	396	512	544	564	N/A
TOTAL	11,589	11,439	15,236	13,271	N/A
CHILE 2/					
Oranges	95	120	115	115	N/A
Lemons	64	80	85	75	N/A
TOTAL	159	200	200	190	N/A
SOUTH AFRICA, REPUBLIC OF					
Oranges	577	682	739	690	N/A
Grapefruit	115	129	152	129	N/A
Lemons	63	65	77	62	N/A
TOTAL	755	876	968	881	N/A
URUGUAY 2/					
Oranges	79	68	70	81	N/A
Tangerines	45	35	37	43	N/A
Grapefruit	8	8	8	9	N/A
Lemons	52	54	54	62	N/A
TOTAL	184	165	169	195	N/A
TOTAL SOUTHERN HEMISPHERE					
Oranges	12,497	12,314	16,218	14,272	N/A
Tangerines	809	810	838	817	N/A
Grapefruit	374	367	371	383	N/A
Lemons	710	801	652	734	N/A
Citrus, other	396	512	544	564	N/A
TOTAL	14,786	14,804	18,623	16,770	N/A
GRAND TOTAL					
Oranges	31,196	30,990	36,447	33,868	N/A
Tangerines	6,588	6,914	6,595	6,186	N/A
Grapefruit	3,648	3,779	3,967	3,266	N/A
Lemons	3,715	3,320	3,407	3,288	N/A
Citrus, other	1,633	1,838	1,823	1,931	N/A
TOTAL	46,780	46,841	52,239	48,539	N/A

1/ December 1990 Estimate unless otherwise noted. 2/ Estimate previously reported.

December 1990 Production Estimates and Crop Assessment Division

CHINA OILSEED UPDATE

Customs officials of the Chinese Government announced that import tariffs on vegetable oils would be changed to reduce foreign imports, bolster domestic prices, and stimulate further oilseed output by local producers, according to the U.S. agricultural counselor in Beijing. As of November 1990, import tariffs increased for most oils except for linseed oil, which was reduced by over half the previous level. The average increase for soybean, peanut, sesame, and rapeseed oil import tariffs rose substantially more than for palm and coconut oils, reflecting the Government's desire to reduce imports of domestically produced oilseed products, but allow imports of alternative oils--at a somewhat higher cost. The table below illustrates the change in both the "minimum" and "general" tariff schedules. Minimum tariffs are applied to countries which have trade agreements with China, which includes the United States, while all other countries are covered by the "general" tariff schedule.

CHINA'S VEGETABLE OIL TARIFFS
(effective November 20, 1990)

	MINIMUM			GENERAL			Percent Diff. General vs. Minimum	
	Old	New	(%Diff)	Old	New	(%Diff)	Old	New
Soybean	6	20	233	11	30	173	50	83
Peanut	6	15	150	11	20	83	33	83
Sesame	9	15	67	14	20	43	33	55
Rapeseed	9	25	178	14	35	153	40	55
Linseed	50	20	-60	70	30	-57	50	40
Palm	20	30	50	30	40	33	33	50
Palm kernel	20	30	50	30	40	33	33	50
Coconut	20	30	50	30	40	33	33	50

Source: Chinese customs tariffs commission and U.S. agricultural counselor, Beijing

As an oilseed policy, this change is in line with the Government's continuing efforts to motivate agricultural producers to increase output through market oriented incentives rather than through central planning on a micro-economic scale. In early 1990, the Government announced the largest ever increase in the State procurement prices for edible oils, with an average increase of over 27 percent, provided that the individual Provinces had not already increased local government procurement levels. An equivalent price increase applied to oilseeds as well, with price adjustments for seed quality and oil extraction rate. The price incentives probably encouraged some producers to increase output during 1990/91, but the free domestic market system still offers prices above government procurement levels.

The Chinese Government's attention to the agricultural sector began in earnest early in the 1980's with the commitment to dismantle the large communal farm system in favor of local and producer control. The purpose was to increase output by reducing bureaucracy and improving efficiency through more direct producer management. By 1984 the commune system was officially disassembled.

Not only did producers obtain more freedom to manage their productive resources, they also had more open markets for their produce. The transformation of the restrictive market system under central planning to a more free market environment has so far been complicated by a combination of poor transportation infrastructure, government policies that have tended to restrict free market development rather than encourage it, and the lack of timely market supply and price information. However, progress toward a free market system has occurred since the mid-1980's. Today, producers find themselves with a somewhat precarious mix of oil production quotas with monopolized procurement prices, local negotiated contracts, and a free market pricing system. Further progress in dismantling China's centrally planned marketing system is projected to continue with the eventual elimination of the government's procurement system.

Since 1975, the increase in China's agricultural output has been impressive. Not only has the rate of production climbed--up 108 percent for the five major oilseeds, 135 percent for wheat, 100 percent for corn, and up 47 percent for rice, compared to 1974/75, but per capita output is up as well. Oilseed production is equal to 28.9 kilograms per person in 1990/91, 66 percent above the level of 17.4 kilograms in 1974/75. Yet, total area under production for oilseeds and grains combined, up just 2 percent, has changed little during this period. Crop area devoted to oilseeds since 1974/75 climbed 5.9 million hectares (36 percent), to 22.3 million in 1990/91, compared to an increase of 3.7 million (15 percent) for wheat, corn, and rice, combined. However, rice area decreased during this period by 3.1 million hectares or 9 percent. To add new crop area for oilseeds, wheat, and corn, producers shifted area out of small grains. In addition to rice, major reductions occurred in barley, millet, oats, and sorghum, which by 1990/91 declined by a total of 7.9 million hectares or 49 percent from the area planted in 1974/75.

Better management of resources and increased use of chemical fertilizers have pushed oilseed production, as well as grains and rice, up significantly. Oilseed yields have increased an average of 66 percent from 1974/75 to 1990/91, ranging from a low of 50 percent for peanuts, to a high of 93 percent for sunflowerseed. Soybeans have shown the least growth in yields, but the harvest is estimated at a record 1.51 tons per hectare in 1990/91, producing 11.5 million tons from 7.6 million hectares. This is 19 percent below USDA's expected world average soybean yield of 1.87 tons per hectare, but above the Soviet Union (1.10 tons per hectare) and India (0.95 tons per hectare).

China's total oilseed production has stabilized since 1984/85 within a range of 29 to 34 million tons. Yields, affected by weather and inputs, are the main cause of this variation, as oilseed area has varied only marginally within a range of 21.8 to 22.4 million hectares. Improvements in yield, through better management, improved seed varieties, and increased use of fertilizers have leveled off. The program to increase yields has several barriers to overcome, which the Chinese Government fully understands. However, progress in this direction will likely be slower than the pace demonstrated since 1980.

The possibility of higher open market oilseed prices in response to tariff reductions on foreign oil imports comes at a time when producers are facing a complex decision-making environment.

- A mixture of even higher oilseed prices on the open market and low-priced government contract quotas may cause resentment by farm producers against government policy. Some apprehension already affects producer confidence in the government's willingness and ability to fulfill contract obligations, either in cash or promised low-priced input guarantees.

- o China's budget designated for investment in the agricultural sector declined between 1979 and 1988, but a planned redistribution of funds in favor of agriculture began in 1989. This did not prevent cash shortages for crop procurement in the fall of 1988 and winter 1989 that caused the government to pay producers for contracted crop quotas, with government IOU's. As a result of the cash shortfall, local cadres used administrative means to ensure producers delivered their contracts. Meanwhile, government-controlled newspapers stressed contractual commitments and patriotic duty. In 1989 the Government promised that the issuing of IOU's will not be repeated in the future. However in 1990, the Government announced that after the delivery of crop quotas, producers must wait 20 days before the cash payment will be available.

- o The use of chemical fertilizers has steadily increased, but pesticide availability has declined. Fertilizer supplies were seriously disrupted in 1988, as open market supplies competed with official government distribution. Prices rose dramatically in open markets at the same time that the government promised producers fixed supplies at low prices in exchange for forward contracting oilseeds, grains, and cotton. However, strong demand and the potential for profits caused fertilizer to be removed from the State system and sold on the open market. Many producers were left without the guaranteed supply of low-cost fertilizers promised by the government. As a result, in 1989 the Government returned to a State monopolized distribution system by forbidding further open market sales. All supplies, including fertilizer, pesticides, and plastic sheeting, can only by sold through State owned-outlets.

Aside from these important direct producer concerns, the Government faces significant capital expenses for the development of processing facilities and transportation infrastructure. The emphasis of past policy and social design has concentrated on local production, processing, and distribution. A comprehensive plan and monetary commitment is necessary for the creation of needed roads and bridges to allow trade across China.

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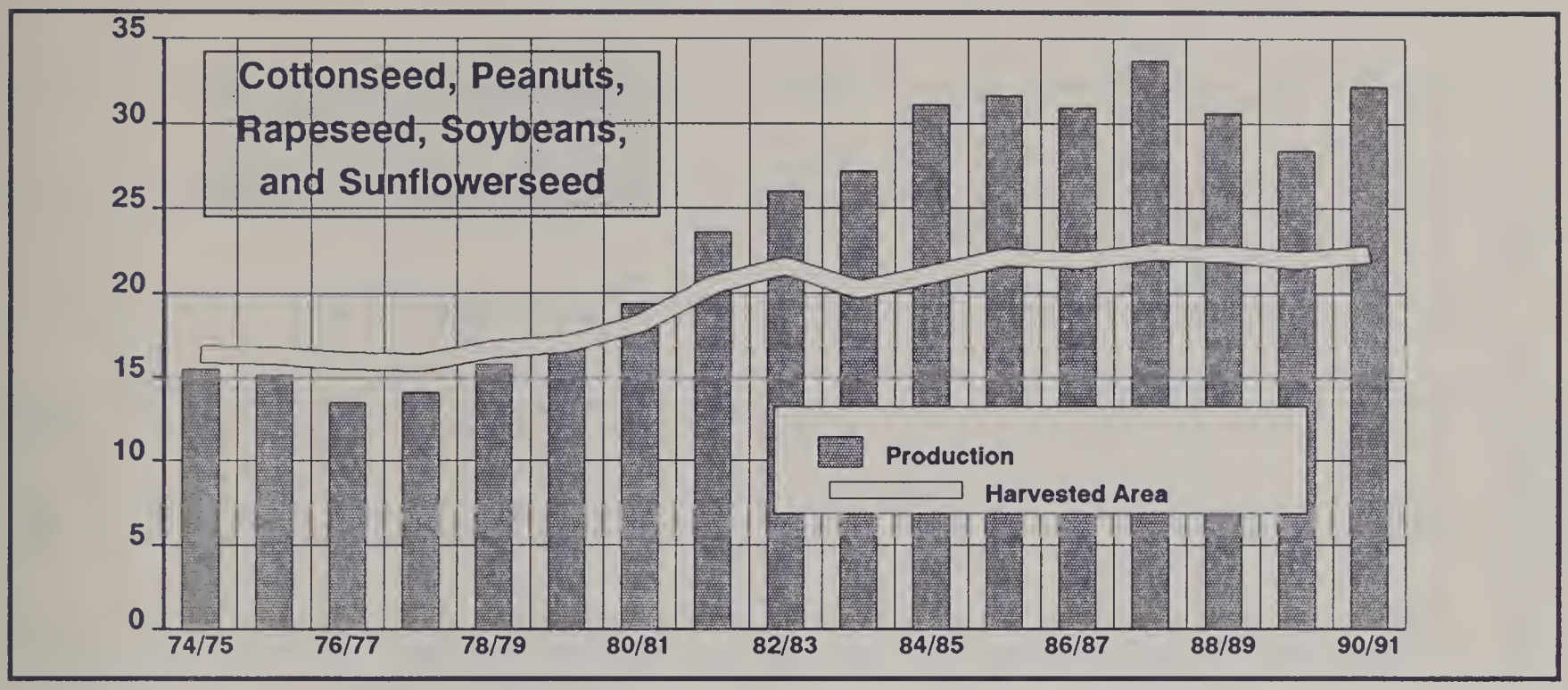
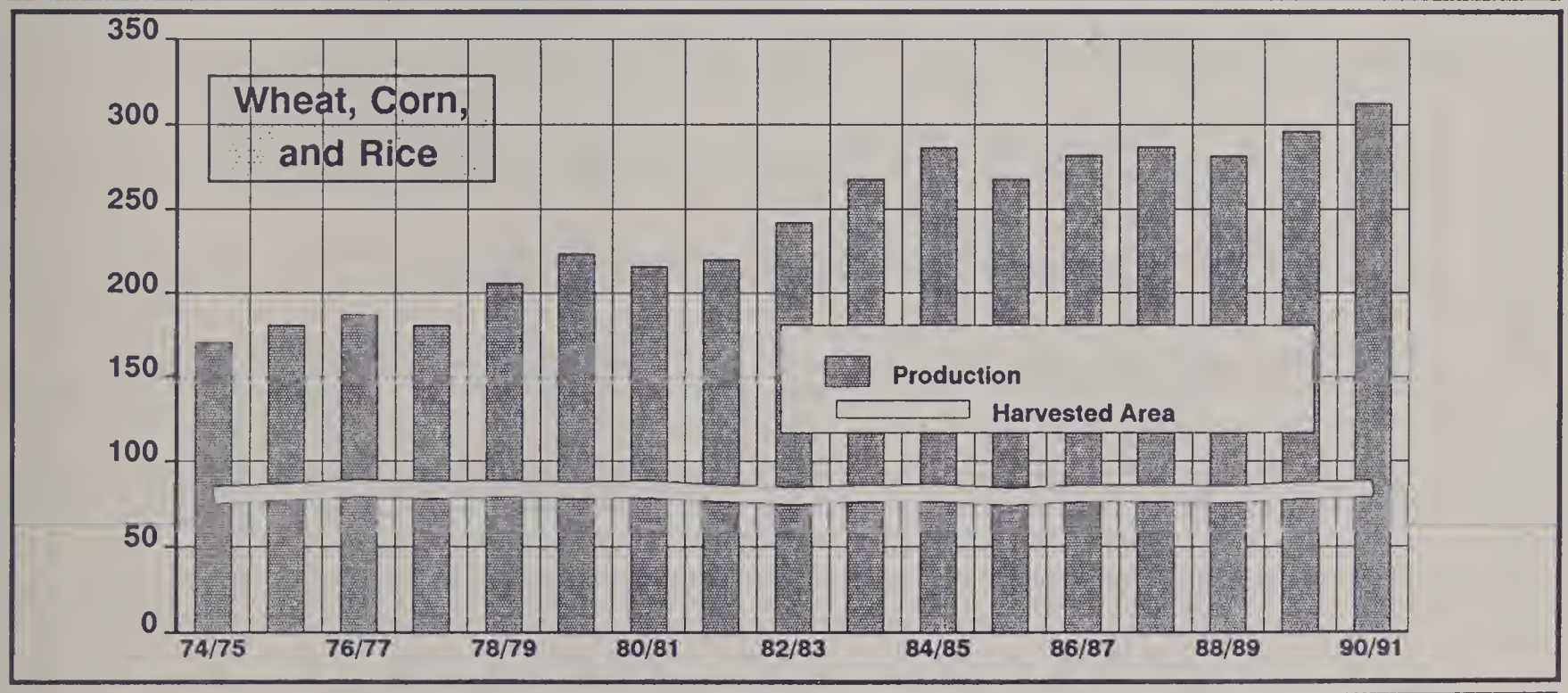
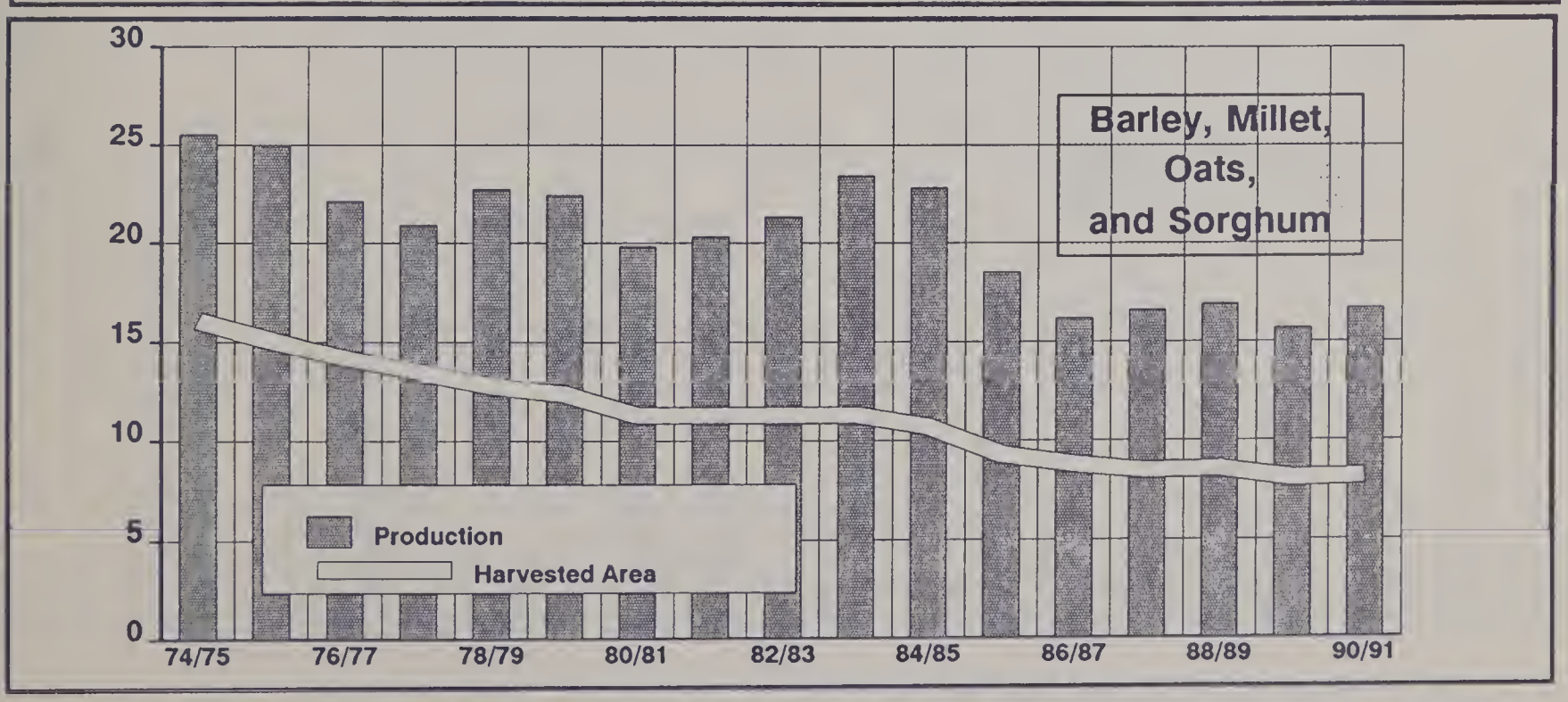
CHART 1

China Production and Harvested Area for Selected Commodity Groups

(million tons and hectares)







DECEMBER 1990

Production Estimates & Crop Assessment Division, FAS, USDA

TABLE 12

China: Harvested Area, Production, and Yields

	74/75	75/76	76/77	77/78	78/79	79/80	80/81	81/82	82/83	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91
Harvested Area (million hectares)																	
Wheat	27.1	27.7	28.4	28.1	29.2	29.4	29.2	28.3	27.9	29.1	29.6	29.2	29.6	28.8	28.8	29.8	30.3
Corn	17.4	18.6	19.2	19.7	20.0	20.1	20.4	19.4	18.5	18.8	18.5	17.7	19.1	20.2	19.7	20.4	21.0
Rice	35.5	35.7	36.2	35.5	34.4	33.3	33.9	33.3	33.1	33.1	33.2	32.1	32.3	32.1	31.9	32.7	32.4
Total	80.0	82.0	83.9	83.2	83.6	82.8	83.5	81.0	79.5	81.0	81.3	79.0	81.0	81.1	80.4	82.9	83.7
Cottonseed	5.0	5.0	4.9	4.8	4.9	4.5	4.9	5.2	5.8	6.1	6.9	5.1	4.3	4.8	5.5	5.2	5.5
Peanut	1.8	1.9	1.8	1.7	1.8	2.1	2.3	2.5	2.4	2.2	2.4	3.3	3.3	3.0	2.9	3.0	3.1
Rapeseed	2.1	2.3	2.3	2.2	2.6	2.8	2.8	3.8	4.1	3.7	3.4	4.5	4.9	5.3	4.9	5.0	5.3
Soybean	7.3	7.0	6.7	6.9	7.1	7.2	7.2	8.0	8.4	7.6	7.3	7.7	8.3	8.4	8.1	8.1	7.6
Sunflowerseed	0.2	0.2	0.2	0.3	0.3	0.4	0.9	1.0	0.8	0.7	1.0	1.5	1.1	0.9	0.8	0.7	0.8
Total	16.4	16.3	16.0	15.9	16.7	17.0	18.2	20.5	21.6	20.2	21.1	22.1	21.9	22.4	22.3	21.9	22.3
Barley	5.3	4.9	4.6	4.5	4.3	4.3	4.1	4.1	3.9	3.8	3.8	3.5	3.4	3.4	3.7	3.3	3.3
Millet	5.2	4.9	4.5	4.5	4.3	4.2	3.9	3.9	4.0	4.1	3.8	3.3	3.0	2.7	2.5	2.5	2.5
Oats	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Sorghum	4.6	4.5	4.3	3.8	3.5	3.2	2.7	2.6	2.8	2.7	2.5	1.9	1.9	1.9	1.8	1.8	1.8
Total	16.1	15.1	14.2	13.5	12.8	12.4	11.3	11.3	11.3	11.3	10.7	9.3	8.8	8.5	8.6	8.1	8.2
Total Harvested Area:																	
Total	112.4	113.4	114.0	112.6	113.0	112.2	113.0	112.8	112.5	112.6	113.0	110.4	111.7	112.1	111.3	113.0	114.2
Index(74/75=100)	100	101	101	100	101	100	101	100	100	100	101	98	99	100	99	101	102
Production (million tons)																	
Wheat	40.9	45.3	50.4	41.1	53.8	62.7	55.2	59.6	68.4	81.4	87.8	85.8	90.0	85.8	85.4	90.8	96.5
Corn	42.9	47.2	48.2	49.4	55.9	60.0	62.6	59.2	60.6	68.2	73.4	63.8	70.9	79.2	77.4	78.9	86.0
Rice(milled)	86.7	87.9	88.1	90.0	95.9	100.6	97.9	100.8	113.1	118.2	124.8	118.0	120.6	121.7	118.4	126.1	129.5
Total	170.5	180.4	186.6	180.5	205.6	223.4	215.7	219.6	242.1	267.8	286.0	267.6	281.5	286.7	281.2	295.8	312.0
Cottonseed	4.2	4.0	3.5	3.5	3.7	3.8	4.6	5.0	6.1	7.9	10.6	7.1	6.0	7.2	7.1	6.4	7.1
Peanut	2.3	2.3	1.9	2.0	2.4	2.8	3.6	3.8	3.9	4.0	4.8	6.7	5.9	6.2	5.7	5.3	5.8
Rapeseed	1.4	1.5	1.3	1.2	1.9	2.4	2.4	4.1	5.7	4.3	4.2	5.6	5.9	6.6	5.0	5.4	6.6
Soybean	7.5	7.2	6.6	7.3	7.6	7.5	7.9	9.3	9.0	9.8	9.7	10.5	11.6	12.5	11.6	10.2	11.5
Sunflowerseed	0.2	0.2	0.2	0.2	0.3	0.3	0.9	1.3	1.3	1.3	1.7	1.7	1.5	1.2	1.2	1.0	1.2
Total	15.5	15.2	13.5	14.1	15.8	16.8	19.4	23.6	26.0	27.2	31.1	31.6	30.9	33.7	30.6	28.4	32.2
Barley	7.0	6.2	7.0	6.3	7.3	7.8	6.8	7.1	7.0	6.8	7.3	6.2	5.6	6.0	6.2	5.7	5.7
Millet	7.5	7.2	5.6	6.2	6.6	6.1	5.4	5.8	6.6	7.5	7.0	6.0	4.5	4.5	4.4	4.0	4.5
Oats	0.9	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.7	0.7	0.8	0.6	0.6	0.6	0.7	0.6	0.7
Sorghum	10.1	10.8	8.7	7.7	8.1	7.6	6.8	6.7	7.0	8.4	7.7	5.6	5.4	5.4	5.6	5.4	5.8
Total	25.5	25.0	22.1	20.9	22.7	22.4	19.8	20.3	21.3	23.4	22.8	18.5	16.2	16.6	16.9	15.7	16.7
Yield (tons per hectare)																	
Wheat	1.51	1.64	1.77	1.46	1.84	2.14	1.89	2.11	2.45	2.80	2.97	2.94	3.04	2.98	2.97	3.04	3.18
Corn	2.47	2.54	2.50	2.51	2.80	2.98	3.07	3.05	3.27	3.62	3.96	3.61	3.71	3.92	3.93	3.88	4.10
Rice(milled)	2.44	2.46	2.43	2.53	2.78	3.02	2.89	3.03	3.42	3.57	3.76	3.68	3.74	3.79	3.71	3.86	4.00
Cottonseed	0.83	0.82	0.71	0.72	0.76	0.83	0.94	0.97	1.05	1.30	1.54	1.37	1.40	1.49	1.27	1.24	1.30
Peanut	1.27	1.21	1.02	1.17	1.34	1.36	1.54	1.55	1.62	1.80	1.99	2.01	1.81	2.04	1.95	1.79	1.90
Rapeseed	0.67	0.66	0.57	0.53	0.72	0.87	0.84	1.07	1.37	1.17	1.23	1.25	1.20	1.25	1.02	1.09	1.25
Soybean	1.03	1.03	0.99	1.06	1.06	1.03	1.10	1.16	1.07	1.29	1.33	1.36	1.40	1.48	1.43	1.27	1.51
Sunflowerseed	0.75	0.75	0.75	0.80	0.87	0.93	1.05	1.28	1.58	1.83	1.68	1.18	1.39	1.40	1.42	1.34	1.45
Barley	1.31	1.28	1.54	1.40	1.70	1.81	1.67	1.75	1.81	1.77	1.94	1.81	1.68	1.78	1.67	1.74	1.73
Millet	1.43	1.46	1.23	1.37	1.54	1.47	1.41	1.48	1.63	1.84	1.85	1.80	1.52	1.69	1.76	1.62	1.80
Oats	1.00	1.00	1.00	1.00	1.06	1.13	1.04	1.08	1.12	1.10	1.20	1.09	1.04	1.10	1.19	1.15	1.21
Sorghum	2.21	2.40	2.01	2.05	2.33	2.40	2.52	2.55	2.50	3.09	3.15	2.90	2.87	2.91	3.14	2.94	3.22

December 1990

Production Estimates & Crop Assessment Division, FAS, USDA

TABLE 13

China: Percentage Difference from 1974/75 for Harvested Area, Production, and Yields

	74/75	75/76	76/77	77/78	78/79	79/80	80/81	81/82	82/83	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91
Harvested Area (1974/75 = 0)																	
Wheat	0	2	5	4	8	8	8	5	3	7	9	8	9	6	6	10	12
Corn	0	7	10	13	15	16	17	12	7	8	6	2	10	16	13	17	21
Rice	0	1	2	0	-3	-6	-5	-6	-7	-7	-7	-10	-9	-9	-10	-8	-9
Total	0	3	5	4	4	4	4	1	-1	1	2	-1	1	1	1	4	5
Cottonseed	0	-1	-2	-3	-3	-10	-2	3	16	21	38	3	-14	-3	10	4	10
Peanut	0	3	1	-8	-3	14	28	35	32	20	33	82	78	65	59	62	67
Rapeseed	0	12	14	8	26	34	38	84	100	78	65	118	138	155	139	142	157
Soybean	0	-4	-8	-6	-2	0	0	11	16	4	0	6	14	16	12	11	5
Sunflowerseed	0	0	0	25	60	84	334	420	307	267	407	637	454	344	315	265	315
Total	0	0	-2	-3	2	4	11	25	32	24	29	35	34	37	36	34	36
Barley	0	-8	-14	-16	-19	-19	-23	-24	-28	-28	-29	-35	-37	-36	-31	-38	-38
Millet	0	-7	-14	-15	-18	-20	-26	-26	-23	-22	-28	-37	-43	-49	-52	-52	-52
Oats	0	-8	-14	-15	-15	-9	-20	-17	-19	-21	-15	-29	-34	-30	-26	-31	-25
Sorghum	0	-3	-6	-18	-25	-31	-41	-43	-39	-41	-47	-58	-59	-59	-61	-60	-61
Total	0	-6	-12	-16	-21	-23	-29	-30	-29	-30	-34	-42	-45	-47	-47	-49	-49
Total Harvested Area:																	
Total	0	1	1	0	1	0	1	0	0	0	1	-2	-1	0	-1	1	2
Production (1974/75 = 0)																	
Wheat	0	11	23	1	32	54	35	46	67	99	115	110	120	110	109	122	136
Corn	0	10	12	15	30	40	46	38	41	59	71	49	65	84	80	84	100
Rice (milled)	0	1	2	4	11	16	13	16	30	36	44	36	39	40	36	45	49
Total	0	6	9	6	21	31	27	29	42	57	68	57	65	68	65	73	83
Cottonseed	0	-3	-16	-17	-12	-10	10	21	46	88	154	68	44	72	69	54	71
Peanut	0	-2	-19	-15	2	21	55	65	69	70	107	187	153	166	145	128	150
Rapeseed	0	11	-2	-15	35	74	73	194	309	210	204	306	326	378	265	294	378
Soybean	0	-3	-11	-3	1	0	6	25	21	31	30	41	55	67	56	37	54
Sunflowerseed	0	0	0	33	86	127	507	788	757	793	1036	1055	929	727	687	553	700
Total	0	-2	-13	-9	2	8	25	52	68	76	100	104	99	117	97	83	108
Barley	0	-11	1	-9	5	12	-2	2	0	-2	5	-10	-19	-13	-11	-18	-18
Millet	0	-5	-26	-18	-13	-18	-27	-23	-12	0	-6	-20	-40	-40	-41	-46	-40
Oats	0	-8	-14	-15	-15	-9	-20	-17	-19	-21	-15	-29	-34	-30	-26	-31	-25
Sorghum	0	6	-14	-24	-21	-25	-33	-34	-31	-18	-24	-45	-47	-46	-45	-47	-43
Total	0	-2	-13	-18	-11	-12	-23	-21	-17	-8	-11	-28	-37	-35	-34	-38	-35
Yield (1974/75 = 0)																	
Wheat	0	8	17	-3	22	41	25	40	62	86	97	94	101	97	96	101	111
Corn	0	3	2	2	14	21	25	24	32	47	61	46	50	59	59	57	66
Rice	0	1	0	4	14	24	18	24	40	46	54	51	53	55	52	58	64
Cottonseed	0	-2	-15	-14	-9	0	12	17	26	55	84	64	67	79	53	48	56
Peanut	0	-5	-20	-8	6	7	21	22	27	41	56	58	42	61	54	41	50
Rapeseed	0	-1	-14	-21	7	30	25	60	105	74	84	86	79	87	53	63	86
Soybean	0	1	-4	3	3	0	7	13	4	25	29	32	36	44	39	23	47
Sunflowerseed	0	0	0	7	16	24	40	71	111	144	124	57	86	87	90	79	93
Barley	0	-2	18	8	30	39	28	34	39	36	48	39	28	36	28	33	32
Millet	0	2	-14	-4	7	2	-2	3	14	29	29	26	6	18	22	13	26
Oats	0	0	0	0	6	13	4	8	12	10	20	9	4	10	19	15	21
Sorghum	0	9	-9	-7	6	9	14	15	13	40	43	31	30	32	42	33	46

December 1990

Production Estimates & Crop Assessment Division, FAS, USDA

TABLE 14

China: Per Capita Production and Population Growth

	74/75	75/76	76/77	77/78	78/79	79/80	80/81	81/82	82/83	83/84	84/85	85/86	86/87	87/88	88/89	89/90	90/91
Per capita production (kilograms)																	
Wheat	45.8	49.7	54.5	43.8	56.6	65.0	56.4	60.2	68.2	80.2	85.5	82.5	85.5	80.4	78.9	82.6	86.5
Corn	48.1	51.8	52.1	52.7	58.8	62.2	64.0	59.8	60.4	67.2	71.4	61.4	67.3	74.1	71.4	71.8	77.1
Rice (milled)	97.3	96.5	95.3	96.0	100.8	104.3	100.1	101.7	112.8	116.4	121.4	113.4	114.5	114.0	109.3	114.7	116.1
Total	191.3	198.0	201.9	192.5	216.2	231.6	220.5	221.7	241.4	263.8	278.3	257.3	267.4	268.5	259.5	269.1	279.8
Cottonseed	4.7	4.4	3.8	3.7	3.9	3.9	4.7	5.1	6.1	7.8	10.4	6.8	5.7	6.8	6.5	5.9	6.4
Peanut	2.6	2.5	2.0	2.1	2.5	2.9	3.7	3.9	3.9	3.9	4.7	6.4	5.6	5.8	5.3	4.8	5.2
Rapeseed	1.6	1.7	1.5	1.2	2.0	2.5	2.4	4.1	5.6	4.2	4.1	5.4	5.6	6.2	4.7	4.9	5.9
Soybean	8.4	7.9	7.2	7.7	8.0	7.7	8.1	9.4	9.0	9.6	9.4	10.1	11.0	11.7	10.7	9.3	10.3
Sunflowerseed	0.2	0.2	0.2	0.2	0.3	0.4	0.9	1.3	1.3	1.3	1.7	1.7	1.5	1.2	1.1	0.9	1.1
Total	17.4	16.7	14.6	15.0	16.6	17.4	19.9	23.8	25.9	26.8	30.2	30.3	29.4	31.6	28.3	25.8	28.9
Barley	7.8	6.8	7.6	6.7	7.7	8.1	7.0	7.2	6.9	6.7	7.1	6.0	5.4	5.7	5.7	5.2	5.1
Millet	8.4	7.8	6.0	6.6	6.9	6.3	5.6	5.8	6.6	7.4	6.8	5.7	4.3	4.2	4.1	3.7	4.0
Oats	1.0	0.9	0.8	0.8	0.8	0.9	0.7	0.8	0.7	0.7	0.8	0.6	0.6	0.6	0.6	0.6	0.6
Sorghum	11.4	11.8	9.4	8.2	8.5	7.9	6.9	6.7	7.0	8.2	7.5	5.4	5.1	5.1	5.2	4.9	5.2
Total	28.6	27.4	23.9	22.3	23.9	23.2	20.2	20.5	21.2	23.1	22.2	17.8	15.3	15.6	15.6	14.3	15.0
Percent change in per capita production since 1974/75																	
Wheat	0	8	19	-4	23	42	23	31	49	75	86	80	87	75	72	80	89
Corn	0	8	8	9	22	29	33	24	25	40	48	27	40	54	48	49	60
Rice (milled)	0	-1	-2	-1	4	7	3	5	16	20	25	17	18	17	12	18	19
Total	0	3	6	1	13	21	15	16	26	38	45	34	40	40	36	41	46
Cottonseed	0	-5	-19	-21	-17	-17	0	9	30	65	121	44	22	44	39	25	36
Peanut	0	-4	-22	-19	-4	12	41	48	50	49	80	146	114	122	102	85	100
Rapeseed	0	9	-6	-20	27	61	57	165	264	172	164	248	260	299	200	219	282
Soybean	0	-5	-14	-8	-5	-8	-3	12	7	15	13	21	32	39	28	11	23
Sunflowerseed	0	-2	-4	27	74	109	453	699	662	684	885	889	772	591	547	430	539
Total	0	-4	-16	-14	-5	0	14	37	49	54	74	74	69	81	62	48	66
Barley	0	-13	-2	-14	-2	4	-11	-8	-11	-14	-9	-23	-31	-27	-27	-34	-34
Millet	0	-7	-29	-22	-18	-25	-34	-31	-22	-12	-19	-32	-49	-50	-52	-56	-52
Oats	0	-10	-17	-20	-20	-16	-27	-25	-28	-30	-26	-39	-44	-41	-39	-44	-40
Sorghum	0	4	-17	-28	-26	-31	-39	-41	-39	-28	-34	-53	-55	-55	-55	-57	-54
Total	0	-4	-17	-22	-17	-19	-29	-29	-26	-19	-22	-38	-46	-46	-46	-50	-48

Population Growth: China and Selected Others (millions)																	
COUNTRY	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Africa	402	414	426	439	452	466	480	494	508	523	539	555	572	589	606	624	642
China	891	911	924	938	951	965	978	991	1,003	1,015	1,028	1,040	1,053	1,068	1,083	1,099	1,115
EC-12	311	312	313	314	315	317	318	319	320	321	321	322	323	324	325	326	327
India	607	621	634	647	661	675	689	702	716	730	744	759	772	788	804	820	837
South America	209	214	219	224	229	234	240	245	251	256	262	268	273	280	286	292	299
Soviet Union	252	254	257	259	261	263	266	268	270	273	275	278	280	283	285	288	290
United States	214	216	218	220	223	225	228	230	232	235	237	239	241	243	246	248	251
All Others	1,111	1,134	1,157	1,180	1,204	1,227	1,251	1,275	1,300	1,325	1,350	1,376	1,402	1,427	1,453	1,479	1,506
Total World	3,998	4,077	4,149	4,222	4,296	4,372	4,450	4,524	4,600	4,678	4,756	4,837	4,915	5,001	5,088	5,177	5,267
Percent change in population growth since 1974																	
Africa	0	3	6	9	12	16	19	23	26	30	34	38	42	47	51	55	60
China	0	2	4	5	7	8	10	11	12	14	15	17	18	20	22	23	25
EC-12	0	0	1	1	1	2	2	3	3	3	3	4	4	4	4	5	5
India	0	2	4	7	9	11	13	16	18	20	23	25	27	30	32	35	38
South America	0	2	5	7	10	12	15	17	20	23	25	28	31	34	37	40	43
Soviet Union	0	1	2	3	4	4	5	6	7	8	9	10	11	12	13	14	15
United States	0	1	2	3	4	5	6	8	9	10	11	12	13	14	15	16	17
All Others	0	2	4	6	8	10	13	15	17	19	22	24	26	28	31	33	36
Total World	0	2	4	6	7	9	11	13	15	17	19	21	23	25	27	29	32

SOURCE: FAO Population database as constructed by PECAD/FAS/USDA

December 1990

Production Estimates & Crop Assessment Division, FAS, USDA

COTTON PRODUCTION IN SELECTED COUNTRIES

World cotton production for 1990/91 is projected at 87.2 million bales, well above the 79.9 million bale crop of last year, with over half the increase coming from the two top producers, China and the United States. In the October World Agricultural Production report (WAP 10-90), the top seven producers with an estimated production of 70.9 million bales or 81 percent of the world's cotton output were highlighted. The next seven largest producers are featured this month. The countries ranked in order of 1990/91 production levels are Australia, Egypt, Argentina, Paraguay, Greece, Mexico, and Syria. Each one produces in excess of 500,000 480-pound-bales annually. These countries, in combination, generate about 10 percent of the world's cotton production and account for 9 percent of the gain in output for 1990/91.

Australia is currently the eighth largest cotton producer with output rising at an average rate of 18 percent per year over the past decade. The 1990/91 growing season, just getting under way, is expected to reach a record for both output and area at 1.6 million bales from a harvested area of 270,000 hectares. Reports indicate that improved reservoir levels have enabled New South Wales to issue additional irrigation licenses for 1990/91, thus increasing available area for cotton.

In addition, depressed earnings for most other crops are boosting interest in cotton cultivation on non-irrigated land. These areas are normally devoted to competitor crops of soybeans and sorghum. However, production in these areas is rainfall dependent. Therefore, total cotton plantings could decline from the estimated 270,000 hectares, if these areas do not receive adequate rainfall.

Egypt is the world's ninth largest cotton producer and a major source of extra-long and long-staple cotton. Cotton is the country's most important export crop, playing a vital role in the economy. Despite its economic importance, cotton production has declined steadily over the past decade at an average annual rate of nearly 4 percent. The problem is two-fold: the low cotton procurement price offered by the government relative to the more lucrative free-market returns from non-controlled crops has induced many farmers to shift to other crops. Cotton is being displaced by grain and berseem clover production as population expansion increases the need for food. Despite this, Egyptian production is estimated at 1.5 million bales in 1990/91, up 0.2 million bales or 11 percent from last year. Favorable weather and a lack of insect infestation during the growing season helped boost yields plus there was a slight increase in area.

Argentina is currently the tenth largest cotton producer in the world, harvesting almost 2 percent of the world total. For the past decade cotton output has grown at an average annual rate of 10 percent. Output for the 1990/91 growing season, just commencing, is estimated at a record 1.35 million bales, an increase of 6 percent from last year. Area is currently estimated at a record 640,000 hectares, an increase of 12 percent from the previous year. Production is concentrated in the northeast region of Argentina, with 65 to 70 percent of planted area in the Chaco province. Midway through planting operations, severe flooding occurred throughout the low-lying areas in Chaco, necessitating replanting. Final production amounts will be largely dependent on recovery of the replanted area.

In Paraguay, cotton production for 1990/91 is estimated at a record 1.28 million bales, 24 percent above last year. Area is currently estimated at a record 560,000 hectares. For the past decade cotton output has grown at an average annual rate of 23 percent. Sowing of the current cotton crop occurred mostly under favorable weather and is complete. Since then, warm weather has been accompanied by showers, and germination is reportedly good.

Greece is estimated to produce 1.15 million bales of cotton in 1990/91, down 2 percent from last year, but 20 percent above the 5-year average. For the past decade cotton output has grown at an average annual rate of 12 percent. Although Greece is suffering from a prolonged drought, 1990/91 cotton production was impacted only marginally. With 95 percent of the 280,000 hectare crop irrigated, yields were cut slightly. The small increase in area, and timely rains in August, somewhat compensated for the slight reduction in yields. The European Community's Common Agricultural Policy, plus high world cotton prices, encouraged farmers to plant more area to cotton this year, mainly at the expense of irrigated corn. With an EC subsidy of 88.4 drachmas per kilogram and an international price of 57.5 drachmas, cotton is considered a profitable crop.

Mexico is currently the thirteenth largest cotton producer in the world, accounting for 1 percent of the world total. Cotton output has declined at an average annual rate of 5 percent over the past decade. However, production this year is estimated at 810 thousands bales, up almost 5 percent from the low level of 1989/90. Area is up 1 percent from last year. Farmers increased cotton plantings at the expense of other crops because of the short water supply. Even though most cotton is irrigated, it is the preferred crop when water resources are low. In addition, the relatively high international cotton price made the crop more attractive. Due to recent policy changes in Mexico, world prices are now used as a benchmark for domestic prices.

Syria is the fourteenth largest cotton producer in the world. Cotton output has increased at an average annual rate of less than 1 percent over the past decade. Production for 1990/91 is estimated at about 625 thousands bales, down 7 percent from last year as both area and yield declined. The crop is totally irrigated. However, low precipitation in 1990 reduced irrigation water supplies resulting in a reduction in both area and yields. Cotton production is expected to increase in the future as a result of yield increases achieved by planting more drought-tolerant cotton varieties. Recently, production policy administered by the Cotton Marketing Organization has been relatively stable. If this stability continues, it should help increase cotton output in the future.

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TABLE 15

COTTON DATA FOR SELECTED COUNTRIES
MARKETING YEAR 1990/91

	480-LB BALES (1000)	PERCENT OF PRODUCTION	Yield (Kg/Ha)	AREA HARVESTED (1000 Ha)	PERCENT OF AREA
WORLD	87,176	100.0	565.5	33,567	100.0
TOP SEVEN	70,919	81.4	582.9	26,491	78.9
China	19,300	22.3	764.0	5,500	16.4
United States	15,399	17.7	718.9	4,664	13.9
Soviet Union	12,400	14.3	857.1	3,150	9.4
India	10,400	12.0	290.3	7,800	23.2
Pakistan	7,030	8.1	564.8	2,710	8.1
Brazil	3,400	3.9	370.2	2,000	6.0
Turkey	2,990	3.4	976.0	667	2.0
SECOND SEVEN	8,315	9.5	713.9	2,536	7.6
Australia	1,600	1.8	1,290.4	270	0.8
Egypt	1,500	1.7	742.3	440	1.3
Argentina	1,350	1.6	459.2	640	1.9
Paraguay	1,280	1.5	497.7	560	1.7
Greece	1,150	1.3	894.3	280	0.8
Mexico	810	0.9	928.4	190	0.6
Syria	625	0.7	872.4	156	0.5
OTHER	7,942	9.1	380.9	4,540	13.5

TABLE 16

COTTON PRODUCTION CHANGES FROM
MARKETING YEAR 1989/90 TO 1990/91

	PRODUCTION CHANGE (1000-480-BALES)	PROPORTION OF CHANGE (PERCENT)	CHANGE FROM YEAR EARLIER (PERCENT)
WORLD	7,281	100.0	9.11
TOP SEVEN	6,131	84.2	9.46
China	1,900	26.1	10.92
United States	3,203	44.0	26.26
Soviet Union	63	0.9	0.51
India	93	1.3	0.90
Pakistan	347	4.8	5.19
Brazil	370	5.1	12.21
Turkey	155	2.1	5.47
SECOND SEVEN	648	8.9	8.45
Australia	199	2.7	14.20
Egypt	153	2.1	11.36
Argentina	78	1.1	6.13
Paraguay	247	3.4	23.91
Greece	-20	-0.3	-1.71
Mexico	41	0.6	5.33
Syria	-50	-0.7	-7.41
OTHER	502	6.9	6.75

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